The FINGERPRINTS of GOD



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The Fingerprints of God

By WILLIAM M. ORR
To My grind Dr. Sam Higginhottom
William M. Qr.



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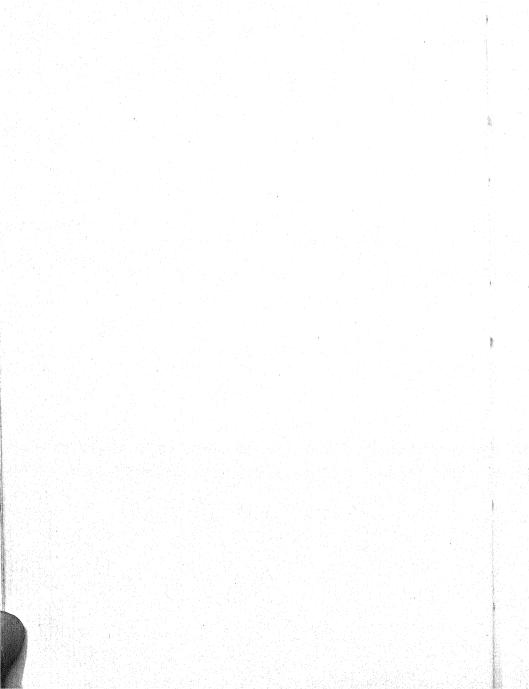


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TO THE CHILDREN OF THE FIRST PRESBYTERIAN CHURCH CANON CITY, COLORADO, TO WHOM THESE STORIES WERE TOLD AS CHILDREN'S SERMONS



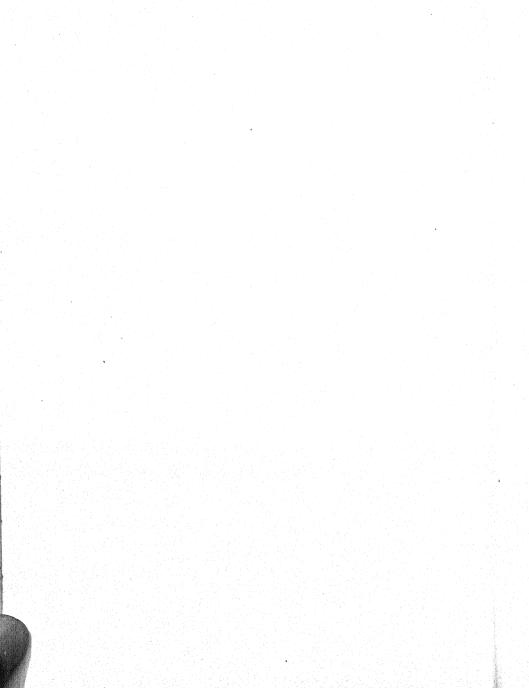
FOREWORD

THESE STORIES were told to the children of the author's congregation over a period of several years. They are, with one or two exceptions, out of the author's experience and are as nearly scientifically correct as the author could make them. The purpose of these stories was to help the children see the hand of God in all the world about them, to recognize those elements in nature which are the identifying fingerprints of God, and with this recognition to realize that God is the creator and preserver of his world.

The author naturally told them in the first person, but in using them those who tell the stories can change the wording to meet the situation. No story is worth telling until it becomes a personal experience in the sense that it is told in the teller's own words.

WILLIAM M. ORR

The First Presbyterian Church Canon City, Colorado



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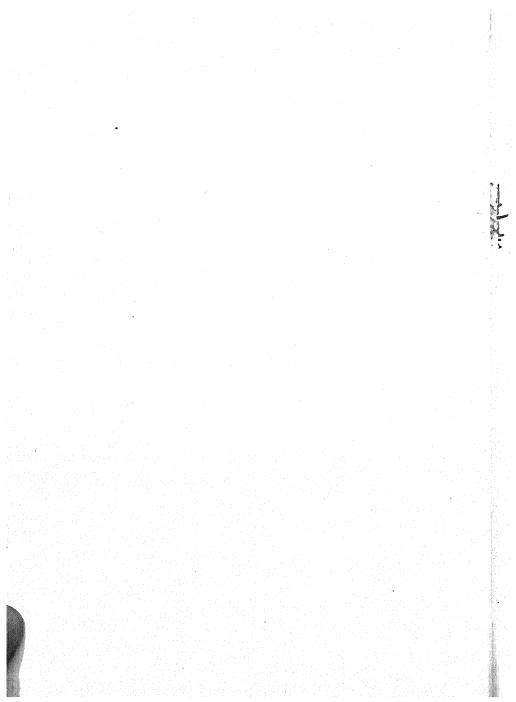
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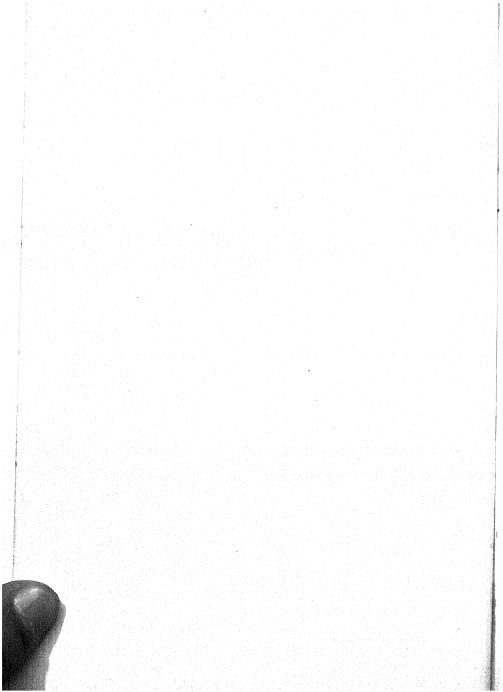
PART I



THE HEAVENS

"Thy heavens, the work of thy fingers."

Ps. 8: 3





THE FINGERPRINTS OF GOD

An African chieftain was asked how he knew that there is a God. He replied: "How do I know that my goats went along the path this morning? By their tracks in the sand. So I know that there is a God. I see the marks of his hands on yonder mountain, in the flowers and trees, and in every living thing." The African had learned what a great many other people do not know. He knew how to look for the marks that God has left to tell us that he is the Creator of everything, and that he is working in his world today. When you know how to look for them, you can see the signs of his handiwork everywhere.

Sometimes you see the print of a hand in the sidewalk. You wonder how it came to be there. When the cement was soft, someone pressed his hand into it and left the print. When the sidewalk became hard the mark of the hand was there to stay as long as the sidewalk lasted. Not long ago some coal miners were opening a passage in a mine near Canon City, Colorado. They had to blast out some solid rock. When the rock was broken they discovered on one side of the break the mark of a foot, left there many centuries ago by a very large animal. That animal is dead, and every other animal like it is dead, but the footprint that it made as it walked in the soft mud at the edge of a marsh still remains. The mud has

become rock, and the footprint tells us a great deal about the animal that made it.

Most children like to play in the mud, making mud pies and other things. If you have ever done it, and left the things you made to dry, you found the marks of your fingers on the dried objects. There are people who can look at those finger-prints and tell just who made them. Many times people who do wrong and think that they will never be found out are discovered by the marks of their fingers which they have left on some object they have touched. Your fingerprint is just like your name. I saw a petition for a new church to be organized among the Ute Indians in southwestern Colorado. Most of those people cannot read or write, but they wanted to sign that petition; so they made their fingerprints alongside their names that had been written by someone else.

When a person writes a check, or a letter, or a book, or paints a picture, he signs his name to it so that people will know who did it. When you leave your fingerprint on anything, you are signing it just as truly as if you were to take your pen and write your name on it.

God has left the marks of his handiwork on everything that he has made. He has signed his name to all creation. It is great fun to look for the fingerprints of God in all the world around you. Yes, you can learn to know them, just as that African chieftain learned to know them, and just as the Psalmist who wrote so many years ago had learned; for he said, "The heavens declare the glory of God; and the firmament showeth his handiwork." When you read the story of creation in the first chapter of your Bible, you find these words over and over again, "And God saw that it was good." These words tell us that God examined the things he had made and

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found them to be what he wanted them to be and marked them with his approval. He left in everything that he made some mark to tell us that he is the Creator. His fingerprints are all over his world. When we learn to look for them, it makes the flowers and trees, the stones and streams, the oceans and mighty mountains, much more interesting to us; for all of them will tell us of God.

THE AURORA

The other morning I looked out of my window to the east, and the whole sky was a glorious yellow, glowing all over like burnished gold. I sat and watched it. Presently there came streaks of old rose, and then the color deepened into a dark red, and in the midst of the red came streaks of gold again, and finally the sun came up. It was a beautiful sunrise. No wonder the ancients called this wonderful changing of the night into the day, Aurora, and personified the glory of the morning as a beautiful goddess.

As I watched that sunrise I thought of other sunrises that I had seen—sunrises on the level plains, when the sun seemed to come right up out of the ground; sunrises on the ocean when the clouds were heavy overhead and the waves were tossing high, and through a rift in the clouds came the glory light of a new day; sunrise on the top of a high mountain after I had spent the night in a bed on the ground with the lightning playing around on the rocks, and the thunder reverberating among the crags, and the rain falling in torrents.

I thought of the wonderful colors that glow and fade and glow again, combinations that no artist has ever been able to imitate. Who paints the morning sky? Whoever it is, he must be an artist beyond compare, using the whole heaven as a canvas, and lavishing the colors without measure. And then after it is all painted he lets it fade, only to be reproduced, time after time, year after year, ever beautiful but never twice the same. That is the reason we never tire of watching the sunrise; there is always something that we have never seen before, some combination of colors, some effect of the light as it chases the darkness across the sky. I have often wished that I could reproduce some of the sunrises that I have seen; but that would be impossible—no camera could catch the swift interchange of light, no artist could ever combine the pigments.

If you ask a scientist how the aurora is formed, he will probably say that it is the light of the early sun, not yet above the horizon, reflected through the dust and moisture in the air, on the clouds. That may do for a scientist, but it won't do for a poet. I much prefer the explanation of the Psalmist, who probably had something like this in mind when he wrote, "The heavens declare the glory of God." Yes, the artist who uses the heavens for a canvas and spreads the colors with such a lavish hand is none other than the great God who created all things and made them beautiful for our enjoyment. He it is that makes the sunrise; he it is that tints the flowers and colors the autumn leaf. He does it to tell us of his love, to make us realize that if he will do so much for these things which fade, how much more will he do to beautify the lives of his people, who are made in his image. And oh, how much more He has done! He has sent his own Son to cleanse us THE STARS 21

from all those things that are not beautiful, and to help us become like Him. The fingerprints of God are clearly seen in the glory of the morning sky.

THE STARS

What do you see when you look up into the skies on a clear night? You say, "That's an easy question; we see the stars, of course, and sometimes we see the moon." Yes, but do you see anything else there? A long time ago a man, who had been a shepherd lad on the hills around Bethlehem, and who watched the stars as he kept the sheep at night, wrote of what he saw there. He saw the stars and the moon, but he saw a great deal more than these. He said, "The heavens declare the glory of God." Did you ever see the glory of God in the skies? If you haven't, perhaps it's because you don't know how to look for it, for it is there.

There are a great many more stars than just those that you and I can see as we look up into the sky. When men first made telescopes, they were crude things and not very large; but when the men looked through them at the night sky, they were much surprised to see many more stars than those they had been used to seeing. Now men have much larger telescopes. There is one being built now that will be twice the size of the largest one ever used before. It will show countless thousands more stars than the shepherd David ever saw. It is not because these stars are so small, that they cannot be seen, for many of them are larger than our sun; but it

is because they are so far away, that men cannot see them without a great telescope.

But even though you cannot see all the stars without a telescope, you can see the glory of God without one. David did not have a telescope. He could see no more stars than we see, and he saw the glory of God. Even one star will show that. He saw the glory of God in the beauty, the orderliness, the dependability of the stars. How he loved them! Each night he watched their procession across the sky; and he learned that if he recognized one of them, he could always know just where to look for the others, for they always moved in the same relationship. The stars of the Great Bear were in the same position, and Orion always wore his belt and sword in the same place, and the Pleiades twinkled every night between the same groups of stars. And when he wandered far from home, he could always find his way back because the North Star could be depended upon as a guide. In all these things he recognized the goodness and the wisdom and the power of God. He saw written large across the night sky the glory of his God, and he knew that the same God who made the stars and set them in their places, also watched over him and cared for him.

The great telescopes reveal to us many more stars, much farther from us, some of them immensely larger, than any we ever dreamed of before; but they do not tell us any more about them than David knew, that is, how they came to be, and what keeps them in their places. The heavens still declare to us the glory of our God. One thing the telescope does for us in showing us that the skies are so much vaster than David ever knew them to be, and that the stars are so many more in number: it makes us realize that the

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God whose glory the heavens proclaim must be infinitely greater than David ever thought Him to be. All those stars so far out that we cannot see them—they, too, are the finger-prints of God, telling of His greatness.

THE WIND

As I six at my desk I can look out my study window and see the American flag at the top of the pole on the school ground across the street. Sometimes when I look out the flag is hanging limply around the pole. At other times the flag is rising and falling, and again it stands out straight from the pole as if it were held there by a rope.

What is it that makes the flag act that way? It is the wind, of course. Do you know that I can tell a great deal about the wind by just watching that flag? I can tell whether there is a strong wind or a gentle breeze, or a perfect calm. When there is little or no wind, the flag hangs in folds about the pole. A gentle breeze simply moves the folds. As the wind increases, the folds rise and fall, sometimes lifting the whole flag and letting it drop back again. When the wind is strong and steady, the flag stands out straight with small ripples running out across it. When the wind is very strong and gusty, the flag snaps and whips around, tugging at its rope as if it would get away. I can tell from what direction the wind is blowing by the way the flag hangs, for it is always on the side away from the wind.

The wind is a very wonderful thing. In the dictionary

it says that wind is air in motion. But that is very unsatisfactory, like a great many other definitions. One immediately asks, why is it in motion, what determines its direction, and why does it blow, anyway? The wind is made to blow by the air in one place becoming warmer than it is in other places; the warm air goes up, and the cooler air rushes in to take its place. Along the seashore the wind blows from the ocean in the morning, because the land warms up more rapidly than the water; and in the evening it blows out to sea because the land cools off more rapidly than the water. In the mountains the morning breeze is up the canyons because the sun hits the tops of the peaks while the valleys are still in the shadows; and the evening breeze blows down the canyon because when the sun leaves the higher ranges they cool off more quickly than the protected valleys.

Winds may be very useful, or they may be very destructive. They are useful in propelling ships over the ocean, in running windmills for pumping water, and in doing other work. They cool us off in the summer when we think we will suffocate with the heat. They carry away the bad odors from the factories and swamps. They carry the clouds over the earth which bring the rain to the thirsty land. Winds that do these things are very helpful to men. But not all winds are so helpful; some are very harmful. When the winds blow too hard, they can do a great deal of damage. They sometimes blow the corn and wheat right out of the ground on the western plains. They bury roads and houses and even cities in the sand that they carry. When they whirl as they blow, they become tornadoes; and where a tornado strikes it leaves a great deal of destruction in its path, often killing people. In the tropics the hurricanes are terrible winds

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that take the roofs from houses, and uproot trees, and destroy the ships at sea.

The wind is another of God's instruments which he has planned to help make the earth a pleasanter and happier place for his people. We enjoy it and use it, but we do not know a great deal about it. We know something about what makes it blow, and what we can expect when it blows; but the words of Jesus are still true, "The wind bloweth where it will, and thou hearest the voice thereof, but knowest not whence it cometh, and whither it goeth." He said that the Holy Spirit is like that. He works in us, and does a great many things for us; but we cannot understand all about the Spirit of God. But even though we cannot understand it all, we can enjoy the wind and benefit by it, and we can enjoy the Holy Spirit and benefit by His presence in our lives.

THE RAINBOW

One summer we were camping up near the Sangre de Cristo mountains in Colorado. Nearly every afternoon a rainstorm moved across the Wet Mountain valley; and when the sun shone out on the storm as it went farther and farther away, there on the clouds we saw beautiful rainbows. Some of them were perfect, reaching from the ground clear up in a beautiful arch and down to the ground again. We could actually see the place where the end rested. Others were only partial, for the clouds did not cover the whole sky. One day I noticed a very peculiar rainbow. It was short and had all the colors

repeated several times right close together. You can nearly always see a reflection bow, quite a way from the real one; but in this case there were several right together.

Did you ever wonder how a rainbow is made? It looks as if a great artist had taken his brush and, dipping it in a pail of all colors, had swept it across the sky in a graceful curve. In a sense that is true; a great artist did do it, and God is that artist. Back in the early history of man a great flood covered all the land with water. When it had gone down men were afraid that it might happen again; but God said to them, "I do set my bow in the clouds, and it shall be for a token of a covenant between me and the earth," that there should be no such flood again.

But how does God make the rainbow? Well, when it is raining-and you never see a rainbow except when it is raining and there are clouds-sometimes the sun is shining in another part of the sky. When that happens the rays of light from the sun shine across the sky to where the raindrops are falling. As they hit the drops the sunbeams are bent, sometimes several times, inside the drop; and finally the rays of light come out again, but in a different direction from that in which they went in. And when they come out they are all shattered to pieces; parts of the sunbeams are bent more than others, and each part has a different color. As you look up into the sky where the sunbeams are playing with the raindrops, you see the different colors coming out of the drops, and those are the colors of the rainbow. But do you know that the bow you watch is constantly changing-never for two minutes, or two seconds, or even for a hundredth part of a second the same. For the drops keep falling and the sun must play with the drops in a certain place for you to see the bow. And do you

know that if you and I were standing side by side, looking at a rainbow, each of us would see a different bow, made by different sunbeams, on different drops of water.

Yes, a rainbow is a very beautiful and a very wonderful thing, one of the most wonderful of the many beautiful things that God makes for our pleasure. And remember that it can be formed only against the clouds, by the sun shining on the raindrops, and that God makes a different one for each of us. When you see a rainbow you can say: that is my rainbow; no one else can see it, although someone may see a different one in the same place. As God makes the clouds beautiful in that way by having his sun shine on them, so he makes the dark things in our lives beautiful when Christ, who is the light of the world, shines on them.

FLYING CLOUDS, GOD'S FREIGHT TRAINS

DID YOU ever lie out on the grass on a warm summer day and watch the fleecy clouds drift by? Did you ever wonder where they came from and where they were going and what they were made of? When I was a boy I used to like to stretch out on my back at the end of a corn row and watch the clouds. If the day had been particularly hot, it was likely that those fleecy clouds would be followed by darker ones, covering more and more of the sky; and up out of the west would come rolling great billows of clouds, no longer fluffy and light, but black and threatening. Out of them would come the grumbling of thunder and the distant flash of the

lightning. About that time I would get up and grab my hoe and run for the house. Sometimes I would get there just before the first drops of rain, and sometimes the rain would catch me on the way. And how it would rain! At first great drops that seemed as large as a teacup would splash on the ground, and then it seemed as if all the water-faucets in the sky were turned on full force so that the water could come down in torrents. The storm would last for half an hour, and then the lightning would be less frequent, and the thunder would rumble and die out in the east. The rain would stop; and through a rift in the clouds the setting sun would cast a glory-light over all the newly washed world, making the drops of water on the leaves of the trees and on the grass sparkle like so many jewels.

Clouds are wonderful things. As they float along up there in the air, one thinks that they must be as light as a feather—yes, lighter than a feather; for a feather will settle to the ground, but clouds stay away up in the air, most of the time. You and I, who live in the mountains, have seen them down below the peaks; but mostly they are high up above the trees and hills.

But clouds are not so light. They are the freight trains of the skies. They carry tremendous loads of water. It was not an uncommon thing for an inch of rain to fall from one of those thunderstorms I spoke of. Now do you know how much an inch of water all over the ground would weigh? Well, water an inch deep all over the roof of an average house would weigh as much as a good-sized load of coal. And if it were all over a city block it would weigh close to three hundred tons, or as much as a great locomotive on the railroad. Yet the clouds carry all that water swiftly across the sky.

RAIN 29

One time as we were driving along a straight road we noticed that we were in the shadow of a small cloud, and that it was going in the same direction that we were traveling; so we thought we would see how fast it was going. As we kept along in the shadow our speedometer showed that the cloud was going more than thirty miles an hour, and it was not a windy day.

The Bible speaks of the clouds as God's chariots. Truly they are that. They carry God's burdens of refreshing rain. How do they do it? The water is vaporized and lifted up by the sun, and so long as it remains as vapor it is carried about. But when the cloud strikes a cold current of air, then the water condenses into drops and falls as rain. Clouds are wonderful things, and we should remember that they are a part of God's planning. He made them; he gave the laws by which the clouds carry the water and drop it on the land.

RAIN

Do you LIKE it when it rains? Well, it depends a good deal on who you are and where you live and how much it has rained. If you are planning a picnic and it rains, you probably do not like it. If you are a traveler trying to get on your way, you probably would rather not have it rain. And if it has rained a great deal so that everything is soaking wet and muddy, you probably wish heartily that the rain would let up. But there are people who are glad to have it rain. The farmer



who plans to plant his seed, or who has seed in the ground, is glad to see the rain come so that his seed will grow.

Rain is necessary for growth. There is a place in western Texas where there is very little rain, and the country is almost a desert. But once in a while one going across the country in the early spring is surprised to find all that barren land just covered with beautiful poppy blossoms. For miles and miles along the base of the Franklin and Organ mountains the poppies bloom, when there has been rain in February. Other years, when there has been no rain, there are no blossoms. The sun is just as warm, the soil is just as ready to supply the plants with food, the seeds of the poppy plants are just as ready to grow; but there is no growth, and no blossoms, because there is no rain. We can easily realize that without rain plants cannot grow, but animals and even men are also dependent on the rain.

In that same part of the country people raise a great many cattle. But there was a time when for several years there was scarcely any rain over a very large area; the cattle could find no grass to eat, and the whole country was dotted with the bones of those that had died. In the parts of the earth where there is little or no rain you will find very few people, only just those who can carry in the water they will need for their use.

In the drier parts of the earth men know how great a gift from God rain is. He sends it to make the world more beautiful, to make the plants grow for food for animals and men. When Jesus wanted to teach us how to treat even our enemies, if we wanted to be truly Christian, he said that we should love them and do them good. And to show what he meant, he said, "He [God] maketh his sun to rise on the evil

and the good, and sendeth rain on the just and the unjust." When Paul was preaching to the people of Lystra and wanted them to understand what kind of a God he was preaching about, he said, "And yet he left not himself without witness, in that he did good and gave you from heaven rains and fruitful seasons, filling your hearts with food and gladness."

Let us remember that rain is one of God's wonderful provisions for making the world livable. Without it the seeds would not grow, and there would be no food for the animals or for men. Let us say whenever it rains, "God is blessing the earth again."

SEARCHING FOR WATER

ONE OF THE MOST FREQUENT requests that a mother hears from a small child is, "Mother, I want a drink." And to the tired mother it seems that her child can get thirsty very quickly.

Water is one of the greatest needs of man. Its presence or absence in a country largely determines whether that country will be inhabited or not. In certain parts of our land there are great cities with smaller towns between them, and all along the road between the towns are fields and farms. In other parts of the land there are great stretches in which there are no towns or even houses. I have traveled in some parts of the country for more than forty miles without seeing a house of any kind, just sand and sagebrush, mesquite and greasewood. And even they were dry.

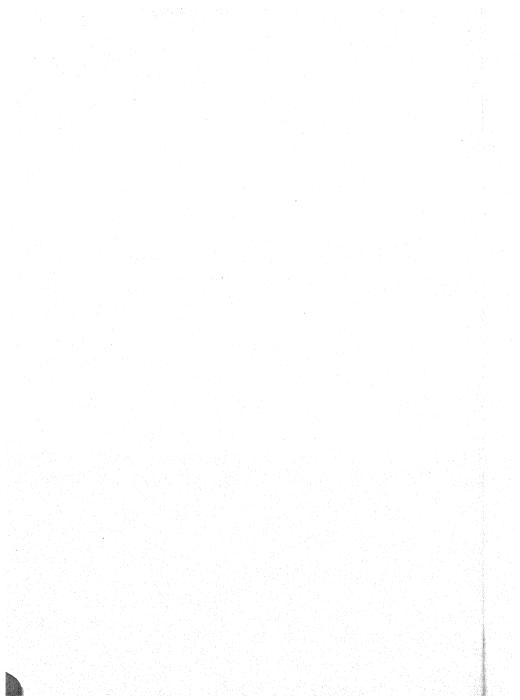
Man needs water for himself to drink. The great cities, like Los Angeles, have huge tunnels, large enough for a street-car to run through, that come down from far up in the mountains hundreds of miles away. Through these tunnels the water is flowing all the time to supply the needs of the people of the city.

All living things search for water. I spoke of the mesquite growing in the desert. Did you know that the mesquite is much larger under the ground than it is above? When the people who live where the mesquite grows want wood, they go out, not with an ax, but with a shovel; for they must dig their wood out of the ground. The roots of a small bush are as large as a good sized tree, and go deep into the ground in the search for water. Alfalfa sends its roots deep into the earth that it may be sure of a sufficient amount of water.

In western Texas there is a group of hills in the desert country. They are known as the Huecho Tanks, for there are hollow places in those rocks which collect water in the rainy season. The cattle for miles around go there for their water. One time I visited the Tanks after there had been several years of dry weather. The Tanks were dry; and the whole place was covered with the bones of cattle that had come there for water and, finding none, perished.

The Bible tells of a woman who went to a well to draw water. She was not a good woman; so she could not go in the cool of the day with the other women, but had to go alone when the sun was high and it was very hot. One day she found a man by the well, and he asked her for a drink. She was surprised and said, "How is it that thou, being a Jew, asketh drink of me, who am a woman of Samaria?" He said to her, "If thou knewest the gift of God, and who it is that

saith to thee, Give me to drink; thou wouldest have asked of him, and he would have given thee living water." In another place Jesus said, "If any man thirst, let him come unto me and drink. He that believeth on me . . . from within him shall flow rivers of living water." Just as our bodies need water, so our souls need Christ, who is the living water.



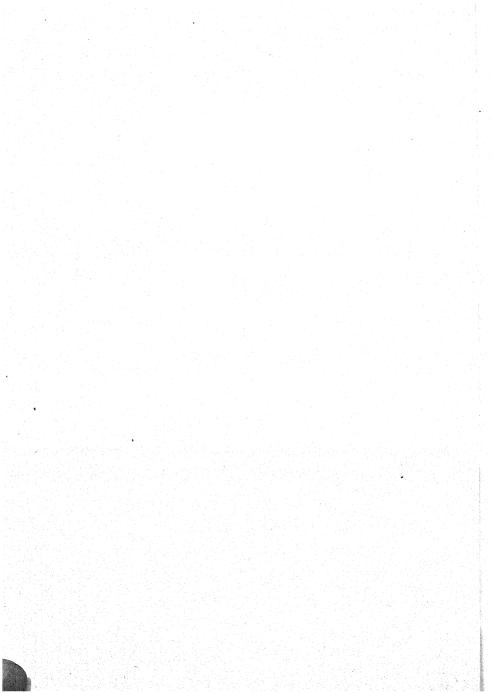
PART II



THE EARTH

"The mountains and the hills shall break forth before you into singing."

Isa. 55: 12.





GOD'S RESERVOIRS

YEARS AGO when the pioneers were traveling out across the western part of the great Mississippi Valley, they sometimes went for days without seeing a tree or finding a spring of water. If it was towards the end of summer, the grass was brown and the air full of dust from the trail made by the heavy wagons. Then, when it seemed they would all die of thirst or the heat, they would come to the top of a little rise and look down into a beautiful green valley with great trees and green grass and a river flowing along. It seemed too good to be true, but it was true. But where could that river come from? There had been no rain for months, and the whole country was dry and dead.

I remember the first time I crossed into the southwestern part of the United States. We had been traveling along on the train, first across the prairies and then across the desert. Finally we began to drop down into a valley. We could see the tall trees and catch a glimpse of the water reflecting the sun. The valley was broad, and there were fields far out from the river. As we drew nearer we were very much surprised to see how suddenly the desert became green fields and orchards and gardens. The line was as clear as between black and white. Here was the desert and only a few feet away a field of waving grain. What made the difference? Between

the two there was a ditch flowing with water. Far up the valley that ditch drew its water from the river, and the river came down from the mountains, so far away that they could hardly be seen through the haze.

Up there many little streams came into the river, each adding its water to the waters of the river. If we follow up those little streams, we find that some come down from the cool forests on the slopes of the mountains, and some from up above the line where the trees can grow. 'Way up there, so high that it is always cool, are the reservoirs of God. Yes, God has planned it so, that up in the high mountains there is stored up a great deal of water which he lets out during the hot months of the summer to water the thirsty land down below.

When you look for the reservoirs of God, however, do not expect to find a beautifully laid up wall of rock, or a solid concrete dam built after the best engineering plan. Of course, there are a great many such reservoirs all over the country. Nearly every city has one for its water supply. In many parts of our land there are immense lakes held back by dams, so that the water can be let out as it is needed. But these are not God's reservoirs. These are man made. God's are of a different kind.

In the cold months of the year—and it is cold much longer up in the high mountains than it is down on the lower country—God is storing his reservoirs full. But instead of building dams, He changes the water into snow, which becomes ice when it is packed down; and these great banks of ice and snow that are heaped up in the shadows of the forests and on the north side of the high peaks are the reservoirs that He has designed to hold the water till it is needed in the sum-

mer. Then when all is dry and thirsty out on the plains, when the crops are in danger of being lost for want of moisture, the very sun that is so drying there opens the floodgates of God's reservoirs and lets out the water, melting the snow and ice as it is needed below.

Those who live in the mountains and on the plains at their base often look up to those high peaks in the winter time; and when they see the clouds hanging about them they know that God is filling his reservoirs and that there will be a plentiful supply of water for the next summer. Even as God has been thoughtful for man's good in this thing, so is he ever mindful of our other needs. These great reservoirs of God, high up in the mountains, are proof of God's goodness; they show us his handiwork; in them we see his fingerprints.

GOD'S STOREHOUSE

DID YOU EVER think that your bodies are made of the same materials that are in the rocks out in the mountains? Your hands don't look much like the rocks, much less feel like them; but they are made of the same stuff. We see the plants growing out of the ground, drawing their food from the soil in which they grow; so they must be made of the same things as the ground. For the soil is nothing but the rocks broken to bits, and made into very small particles; and although the plants can't grow on bare rocks, they take the broken rocks and change them into plant food. We eat the plants and the

flesh from animals that have fed on the plants, and so our bodies are built up of the same materials.

In the second chapter of Genesis, where the Bible is telling about the work of creation, it says, "And Jehovah formed man of the dust of the ground." In the beginning he was made of those things of which the ground is made. And ever since that time man has been building up his body with those materials, by eating the plants that grow in the ground.

As we look up at the hills and higher to the great mountains and see the masses of rock that are there, we do not think of them as a food supply. But that is just what they are. They are the storehouses of God, planned to provide food for all God's creatures, plants and animals and men, through all the ages. In those rocks are stored up a great many different kinds of elements, the things that go to make food for us. Not ordinarily in the form in which we use them, but in a form in which they will be preserved through the years until they are needed for man's use.

We often think of the mountains as the storehouse of God in connection with the wonderful deposits of minerals which are there, the iron, the copper, the silver, the gold, and hundreds of other valuable things which men are just now beginning to learn to use. Did you know that that red clay bank out along the road that gets so slippery when it rains and that sticks to your shoes when you step in it has much of the same stuff in it that your mother's cooking utensils are made of? Yes, clay is largely aluminum; it is kept in those storehouses, and was kept there for ages before man learned how to use it. Now we are beginning to make use of it. So it is with a great many other things.

I said that the mountains are the storehouses of God. That is true, for in them he has stored up all the things that we need for our life on this earth, food for our bodies and other things for our use. There are a great many of them that we do not know how to use yet, many that are still sealed up in the deeper chambers, the keys to which we have never found. When God built the storehouse and filled it with all these things for man's needs, he locked them up; but he didn't throw away the keys. But unlocking the storehouse of God is another story. Let us think of these great mountains and the lower hills and even the level country as the great treasure chest of God in which he has made provision for all the needs of men.

THE KEYS TO THE STOREHOUSE

In the LITTLE COUNTRY of Andorra, away up in the Pyrenees mountains between Spain and France, there is a great chest in which the state documents are kept. It is called the Iron Cabinet. The peculiar thing about that Iron Cabinet is that the door has six keyholes. Each key is kept by a different official of the government, and it cannot be opened unless all six keys are used at the same time.

When God provided the great storehouse in which he has laid up all the mineral wealth and the future food supply for his creatures he also provided keys by which these things can be released for use. These keys are constantly being used under the plan of God, so that there is always enough of the

necessary materials set free for the needs of the plant and animal life of the world. I want to tell you about some of these keys.

If you go out into the hills after a severe rainstorm, you will find at the foot of every slope where the water has run down, heaps of earth and sand and stones. In the mountains, where the steep canyons open out into the valleys, these fans of loose material may be hundreds of feet deep and several miles in extent. They are an illustration of one of the keys to the storehouse-the key of water. It seeps into the rocks and causes them to break up, when it is heated by the sun or frozen by cold. Then it carries the broken rocks down the mountains and down the stream beds, grinding them together and against the rocks in the streams, until they become rounded and smooth. Many times they are broken, and the small bits are ground still finer. The water carries this finely ground rock for many miles down the rivers and finally deposits it far from where it started. There it becomes a part of the soil. Water is one of the keys to the storehouse.

I said that the water in the rocks, when heated or frozen, breaks the rocks. Heat and cold are two more of the keys to the storehouse. They are constantly at work. The differences in temperature between night and day, between summer and winter, cause the rocks to break up.

The wind is another of the keys to the storehouse. The wind picks up the bits of sand and drives them against the rock with great force, breaking the sand grains and grinding off the face of the stone itself. In many parts of the country there are very peculiarly shaped rocks that have been carved into those shapes by the wind-blown sand. Along the shore of lakes and seas the wind drives the waves high and with

such force that the rocks are broken up; and sometimes great masses fall into the water, there to be further ground into fine soil by the constant motion of the water.

But even when the rock is finely ground to powder, it is usually not in a form in which the plants and animals can use it; so God has provided other keys to unlock this last lock. The first of these is called chemical action—the effect of one substance on another to change it into a different form. The action of oxygen in the air on many things changes their form so that they can be used. The action of different minerals on each other has the same effect. The lightning is another key. Not only by breaking up the rock when it strikes, but by the effect of the electricity itself, it releases some things so that they can be used. Then there are little organisms, plants and animals. Some live in the roots of other plants, and they change the things that are in the soil into a form in which they can be used. And plants are a great factory in which the elements in the soil are made into combinations and forms in which they can be used by man.

So God has provided the keys to his great storehouses. He has provided much food for many years, but he is constantly setting it free that there may always be enough for the needs of his people.

If you take a key, almost any key, and look at it, you will find a name on it. It is the name of the maker of that key. So if you know how to look for it, you will find on each of these keys that I have spoken of the name of God; for he is the maker of all these things, and he has made them for this purpose.

MORE VALUABLE THAN GOLD

Do you know of anything that is more valuable than goldlots of fine, bright gold? There are a great many people who think that gold is the most valuable thing in the world; at least they act that way. I have visited the Cripple Creek-Victor district in Colorado many times. These two towns are away up on the tops of the mountains, about ten thousand feet above the sea. And these mountains are the funniest I think I have ever seen. They look as if they had been all turned inside out. At least it seems, as you drive along, that the insides of those mountains are all heaped up on the outside. Those great dumps of rock represent a tremendous amount of work, and the expenditure of a lot of money. It is hard work to dig out the solid rock and haul it out and dump it, as so much has been dug out and dumped up there.

If you could look through those mountains as you look through a glass window, you would see that they are full of tunnels and some great caves where the rock has been blasted out. Do you know what the men who dug those tunnels were digging for? It was to get the gold that was in the rock. Sometimes they found a small vein of ore, a few inches wide, but in order to get it they had to dig the solid rock alongside the vein so that they could get into the mountain. Men worked hard up there, many were hurt, and many were killed. But they kept on because they wanted that gold, and so they dug out a great deal of the inside of those mountains.

But I want to tell you of something that is more valuable than gold. At least the Psalmist thought so, for he said, "More to be desired are they than gold, yea, than much fine gold." He said men ought to want the things he was talking about more than they desire gold, lots of gold. What do you suppose he was thinking of? Can you guess? There are a good many things that are more valuable than gold. There are platinum, and diamonds, and radium, and lots of other things. Your mothers and fathers are more valuable than gold, aren't they? You wouldn't give them up for all the gold in the world, I am sure. But this Psalmist was not thinking of any of these things. He was thinking of the laws of God. He said that they were more to be desired than gold, yea, than much fine gold. Do you think the laws of God are more valuable than gold; would you rather have them than gold? Well, the Psalmist thought they were, because he was very wise. He knew that to know what God wants us to do and then to do it is the very greatest fortune that anyone can have, for it will bring to us all the riches of God's blessings. This is what Jesus meant when he said, "Seek ye first the kingdom of God, and his righteousness; and all these things shall be added unto you." To know and obey the laws of God is to have the kingdom of God in your heart. And along with it you will have happiness, and all the things you really need, and above all eternal life.

The things that you can buy with gold will wear out, or you can lose them, or someone might steal them. But the things that come to you because you do what God wants you to do cannot wear out, or be lost or stolen; and the longer you have them and use them, the better you will like them, the more precious they will become. I think the Psalmist was right when he wrote that psalm.

DIKES

WHEN WE SPEAK of dikes, we ordinarily think of Holland or some other place along the sea or a great river, where long ridges of earth have been piled up to keep back the water. But that is not the sort of dikes I want to tell you about.

Down in southern Colorado there is a place called Stone-wall. It is named that because there is a great wall of stone several feet thick and several hundred feet high standing out from a mountain ridge where a stream has cut through. Over in the northwestern part of New Mexico, on the Navajo Indian reservation, there is a great wall some seventeen miles long running out to the south from the great Shiprock, and another not so long running to the northwest. These walls are about four hundred feet high and five or six feet thick. The lower half is supported by earth sloping down to the plain, but the upper part stands like the wall of a great building.

Who built these walls? Sometime many centuries ago there was a terrible earthquake in which the ground was split open, and into the crack thus formed the hot lava, or molten rock, welled up from 'way down in the earth. Then the lava cooled and formed what men call a dike in between the two sides of the crack, dividing the old rock that before was together. I have seen a dike cutting through a ledge of rock. The stone on either side was just the same, but because of the dike it could never come together again. The dike is

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usually harder than the other rock; so the wind and the rain and the frost will destroy the softer rock and wash away the earth, and leave that great stone wall standing high above the level of the country. That is what has happened out at Shiprock. The whole plain has been leveled down at least as much as that great dike stands above it, but the dike still stands.

Wrongdoing is like one of those dikes. It comes in between us and what ought to be close to us—between us and our friends, our family, and our God. A person who sins cannot come close to God. We do something that makes us turn away from God; and when we want to get back, we find that we can't because that wrong is there like the dike between the two parts of the stone. You know how it is between you and your friend. One day you were playing together; you wanted to do something, and your friend wanted to do something else. She said, "I don't like you." You said, "I hate you." And you both ran home. A few days later you wanted to play with her again; but when you tried to make up, those angry words stood there between you and her.

It is very hard to break down a dike, for it is made of hard stone. But it is possible to prevent dikes from forming between ourselves and our family and friends and God. It may be hard sometimes not to say the mean things, the hurting things, the ugly things; but it can be done. It may be difficult to turn from every temptation that would form a dike between us and God, but it can be done. And that is the very best way to do it, if you don't want those stone walls to form.

A PIECE OF CHALK

I AM SURE that all of you boys and girls know what this is that I have in my hand. It is a bit of chalk. Do you know where it came from? In certain parts of the world there are great beds of chalk. Sometimes they are a thousand feet thick. On the coast of England these chalk beds have been washed by the waves of the ocean till they form high cliffs that rise up out of the English channel several hundred feet. In many other parts of the world there are large chalk beds also.

But what is chalk, and how is it made? Chalk is formed from the shells of little animals, animals so little that you could not see them at all without a powerful microscope. Take this chalk and rub it on your finger, and some white powder sticks to your finger. Each grain of that powder is made up of many little animal shells. These little animals have a name; they are globigerinae. There are some other little animals which help to make chalk, but the globigerinae do most of the work.

Just think of the amount of work and the number of these little animals that helped in building up the great chalk beds that cover so much of the earth's surface. They are at work now, building other chalk beds, for the boys and girls who will live many, many years from now. Not up on top of the land, but down in the deepest part of the Atlantic Ocean they are living, building their tiny houses; and when they die their houses add to the chalk beds of the future.

You say, "That is a slow process." Wouldn't it be discouraging if one were to say to a single globigerina, "Go to work now, and build me a chalk bed three hundred feet thick and a hundred miles across." Or even if one said, "I need a piece of chalk to do my lessons with; won't you make it for me?" It would take the little animal and all his relatives a good long time just to make the piece of chalk.

It is very interesting to study how things are made, and one is impressed with the fact that the things that are great and strong are usually made up of things that are little. The steel that makes the rails for the railroad, or the trusses for the bridges, is made up of tiny crystals which fit together so well that they can scarcely be separated. Your bodies are made up of very tiny cells that we can't see except through a strong glass.

Sometimes we say of something we do, "Oh, that is just a little thing"; or of a lie we tell, "That is just a little lie"; or of some other things, "They don't amount to anything, they are so little." But, boys and girls, all of God's world is made up of little things, little animals, little plants, little words, little acts, little people. And it is the many little things working together that make the big things. There is a little verse:

"Little drops of water, Little grains of sand, Make the mighty ocean And the pleasant land."

The little globigerinae away down on the ocean floor are building up the mighty chalk beds that some day will be raised up, and on which cities will be built and trees will grow and farms will be planted and people will live.

A SHELL IN A ROCK

Walking down a canyon one day where the flood waters had kept the rock clean of sand and earth, I broke a bit of stone from the ledge; and there in the midst of what appeared to be solid rock was a beautiful little shell. Of course the shell had turned to stone; but it was as perfect as the day the little mollusk had left it, untold centuries ago. Each wave, each curve was there. It was easy to tell just what variety of animal it belonged to. As I looked about there were signs of other shells, most of them broken to bits and embedded in the rock, but some as perfect as this one. In some places, instead of the shell, there was a hole, just the shape of a shell; the shell itself, instead of becoming rock, had disappeared after the rock had formed about it.

What is a shell in a rock? how did it get there? what does it mean? All these are questions that come to us as we think of that shell. Is finding a shell there like finding one on the shore of the ocean, or along some river bed? Yes. There is no sea now anywhere near the canyon in which I found that shell in the rock, but that rock at one time was the bottom of a sea, and those shells were the homes of the little animals that lived in that sea. The layer of rock itself was pushed up by the forming of the mountains. To go straight down to find the rest of that same layer, one would have to go thousands of feet under the fields and cities of that part of the country.

That little shell in the rock, although it has turned to stone, has a wonderful story to tell; and I am going to let it tell its story. Just listen to it:

"Once a long, long, long time ago, so long that no one has ever been able to tell just how long it was, a great sea covered the country where the dry land is now. In that sea were many little animals, most of them living in houses that they built for themselves, just like this shell. One of those little animals lived in me, until it died and I dropped to the bottom of the ocean; there, with a lot of other shells, I was covered up in the sand. Deeper and deeper I was buried until I thought the pressure would crush me, as it crushed many other shells. But I was able to bear the weight. After a long time something terrible happened. The ocean bed was lifted high above the level of the water. Finally the water dried out, and the terrible pressure on top turned that sand into solid rock. As I lay there in that rock and the water seeped through, it changed me from the soft shell that I was to hard stone that I am today. Then after a long, long time another terrible thing happened. This time the whole earth seemed to become very hot, and the rocks were pushed and shoved and lifted up until the stone in which I was buried was standing on edge and up near the top of the ground.

"Gradually it cooled off again; and the water, rushing down the mountain, began to cut a canyon in the rock, until the rock in which I lay was very close to the surface, so that when it was struck the piece broke off and I came to the light of day again."

That is the story of the shell in the rock, but that shell tells us more than that; for by learning what kind of a shell it is, and just what rock was above it and below it we can tell to what age it belongs. We can't tell how old it is in years, but in geological ages we can tell. These rock ledges are like the leaves of a great book containing the history of the earth, telling how it was formed, and what took place. These little shells are like the letters on those pages; they are what make the pages understandable.

This little shell tells us that the rock in which it was embedded belonged to one of the oldest rock formations in the world. It tells us more than that. It tells us of the plan of God for his world. To me this little shell in the rock is a message from God, one of his fingerprints, proving that it is his work, helping me to understand this earth, its history and how it was formed. And it proves the words of Jesus when he said, "My Father worketh until now." God is still working in his world, and in our lives, and always for good.

PART III

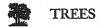


TREES

"And all the trees of the field shall clap their hands."

Isa. 55: 12.





ONLY GOD CAN MAKE A TREE

DID YOU EVER think what a wonderful thing a tree is? They are fine for boys to climb; and in the summer when the sun is hot it's great to lie in the shade and watch the clouds and dream. Trees are beautiful to look at, and they are useful for lumber. But did you ever think of a tree as being a wonderful invention, as doing a great deal of work, as doing things that no man has ever been able to do? Sixty gallons is a good deal of water, and it weighs a good many pounds; yet a large beech tree will draw that much water out of the ground on a hot day, lift it to the topmost branches, and send it out into the leaves, and through the leaves into the air. To do that is real work, but trees are doing that kind of work all the time.

How does the water get from away down in the ground where the roots find it, up to the very top of the highest branches, sometimes hundreds of feet in the air? Well, I'm not going to tell you how it is done, because I don't know; and neither does anyone else know. Some men who have studied it think that the roots force the water up, and others think that the leaves draw it up, and still others think that it is both the push from below and the pull from above that lifts that water. However it is done, the tree does it; and no man has ever been able to invent a similar apparatus that will lift water that high.

The tree is a very peculiarly built structure. If you cut a tree trunk in two, you see a great many rings, one outside the other. Those rings tell us how large the tree was each year of its life. But those rings are the sections of cones, for they come to a point at the top. The inner one is the smallest, and each successive cone is not only larger around, but a little taller. The top of the cone marks the height of the tree that year. When you examine a tree trunk sawed in two, you can tell, by counting the rings, just how old it was; and if you could split that trunk right down the center, you could tell just how tall it was each year of its life.

After a few years the wood on the inside dies and forms a solid center for the tree. Only the outer two or three layers are alive, and it is through those living layers that the water is carried up from the ground to the leaves. While those layers of wood are alive, the cells in them are completely immersed in water. Only so can they live. When the water supply is cut off from the leaves, they die and fall to the ground. This is what happens in the fall of the year. The tree seals up the canals that carry the water to the leaves, and they cannot live without that water. When it gets very dry so that the roots cannot supply water to the cells in the tree trunk, the whole tree dies. Several years ago I was in Wisconsin after there had been several very dry years and saw great cedar trees that had been growing for nearly half a century all brown and dead because they could not get enough water to keep them alive.

As a waterworks system trees are a wonderful invention, so wonderful that no man has ever been able to make anything like it. Truly the poet Joyce Kilmer knew what he was talking about when he wrote that beautiful poem,

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"Trees," which closes with the words, "Only God can make a tree."

TREE RINGS

Do you know that a tree keeps a record of its life, and of the things that go on about it? Some men write stories of their lives, and they are called their autobiographies. The trees, all the trees, are writing their autobiographies.

A friend of mine showed me a section of a tree he had cut away up in the mountains. That section told a wonderful story. It was from one of those gnarled cedars that grow up where the wind is strong, and where the snow is deep. The record that it had made covered more than two hundred and fifty years. It told of years that were very dry, when the tree had a hard time to live; and it told of years with plenty of snow and rain, when the tree grew a great deal. It recorded the fact that a forest fire had swept over that mountain when the tree was seventy-five years old, and that, although it had not killed the tree, it had left it burned and charred on one side, so that that side never grew again. All these things are recorded by rings in the wood round about the center of the tree; the yearly growth is marked by a ring for each year. When the ring is broad, it indicates that the tree grew much, because of good conditions, plenty of water; when the ring is narrow, it tells of dry weather.

I read a very interesting thing about the history of the southwestern part of our country. The Indians did not keep

any records of their buildings, and so we know very little about the history of the pueblos before the coming of the first Spanish explorers about four hundred years ago. But even though the Indians did not put a date on their buildings, as we often do on ours when they are built, the trees did keep a record of that very thing. And because the trees were so faithful in their records, we can now know with certainty a great deal about those Indians for centuries before the white men came to this country.

Do you want to know how this record was kept? Well, I'll tell you. Men knew that all trees living the same year keep the same record for that year; that is, whether it is a good year for trees or not. So they began by cutting down a tree that had lived a long time and counted back from the outside toward the center. In that way they had a date for every ring on that tree; and because it was an old tree the dates ran back a long way, even before the coming of the white man. Then they went to one of the Indian pueblos and found a log that had been placed there when the pueblo was built. They examined the rings on that log, and found that some of them agreed with the rings on the log that they had dated; that is, they found the same series of wet and dry years, and they knew that those rings were made the same year. In that way they could know when the pueblo had been built, by the year that the tree stopped growing, or the year of the last ring on the outside. By finding logs in older pueblos and comparing the rings, they have been able to date rings clear back for nearly fifteen hundred years; and by knowing the year that the tree was cut and stopped growing, they are pretty sure of the year when the building the log was in was built. The trees have helped us to write a history of our

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own country which we could have written in no other way.

Do you know that you are writing the record of your lives in your own bodies? No, you don't add a new ring as the trees do, but your bodies have the record of many of the things that have happened to them. I have scars on my hands which tell many stories. Stories of disobedience when I was a boy, stories of carelessness in the use of the saw and ax and knife, stories of misfortunes and accidents. But the records are not all in the scars. It is in every bone and muscle, and in the very blood of the man. When the native Africans brought the body of David Livingstone out from the heart of Africa to England, the people of England were sure that it was his body because of the false joint in his arm where a lion had crushed the bone years before. Just as the trees leave the record of the good and bad years, so the child who lives right, who eats the proper food and takes the proper rest and is careful of his exercise, has a strong body, one that will withstand sickness and hardship better than the body of the boy who is not careful of these things.

But our records are not all in our bodies. Our souls bear the records of our spiritual life. There are souls that are all gnarled and scrawny and have no strength, because they have been mistreated; and there are souls that are well developed and symmetrical and beautiful, because they have been well cared for and nourished.

Just as the tree writes its own autobiography in the rings that are added each year, so the boy or the girl is writing a record of his own life in his body and soul.

GROWING SHIP'S MASTS

One of the prettiest sights I ever saw was a full-rigged ship sailing the ocean. It was on a bright day when the sun shimmered on the water and the misty horizon made it almost impossible to tell where the sea and sky met. We were driving along on the top of a cliff; and as we rounded a bend in the road overlooking the ocean, there out in front of us, as if it were suspended between the earth and the sky, was a four-masted schooner under full sail. It had been standing in toward the land and was about to take the other leg of the tack. As we watched, it turned and sailed away.

When one visits a harbor where there are many sailing vessels, one is impressed with the veritable forest of masts rising over the water. One wonders where they all come from. Ship's masts must be straight, and tall, and strong. Not just any tree can be used; for it must be able to support the weight of the rigging, bear the stresses of the storm, and at the same time carry the heavily laded vessel through the waves.

Such trees are not found on the edge of the forest. There the trees grow short and many branched. There many of them are twisted and scarred by the storm. Even those which appear to be solid and straight often have wind cracks inside the trunk which would make it dangerous to use them as ship's masts, or for any other purpose where strength and length and straightness are required.

When men want to get the masts for a ship they go deep into the forest, where the trees grow close together, where they help each other to grow straight, and protect each other in the storm, and in friendly rivalry for the light grow tall. It is here in the heart of the forest that ship's masts are to be found. Trees made strong by being protected until they are well started, and grown straight and tall by trying to outstrip their fellows. Such trees can be depended on when the winds are fiercest and the waves are highest and the holds are filled with cargo.

Growing men is a great deal like growing ship's masts. You find the finest, tallest, strongest, straightest in the midst of the congregation of God's people—men who are able to stand against temptation, whose character can be depended on at all times, men of high ideals, who take the leadership in all that is good and right. Such men, almost without exception, have grown up in the midst of the church, having the protection of God's people until their characters are well formed, having their ideal ever lifted toward God.

If you boys and girls want to be tall and straight and strong in your moral and spiritual lives, if you want to be men and women who are honored by other people, able to do your best work in the world, the very best place for you to grow up in that way is in the church of Jesus Christ. There you will be helped in times of difficulty; there you will be strengthened when temptation comes; there you will be inspired always toward those things which are best.

I think the psalmist was thinking of this when he said, "I was glad when they said unto me, Let us go unto the house of Jehovah."

THE SECRET OF THE COFFEE SHADE

Many years ago the farmers in the highlands of Puerto Rico began to plant coffee trees. They discovered that if they planted them in the shade the coffee would grow better than out in the hot sun. So they cleared out the underbrush from the forest, leaving the tall trees, and planted the coffee, which grows there on bushes a little higher than a man. They soon noticed that the coffee trees that were shaded by certain large trees grew better and produced more than the coffee plants that were shaded by other kinds of trees. All of these trees which seemed to be more beneficial had a peculiar kind of blossom, like that of the sweet pea, and the seed grew in long pods. So whenever they wanted to plant coffee they always chose trees with that kind of blossoms and pods for shade.

Now the farmers in Puerto Rico did not know why it was that those trees were better than others, but they knew that they were. They thought that it was something in the shade that those trees produced, and many of them think so today.

The secret, however, is not in the shade, but in the roots of those particular trees. They belong to a large family of plants which are cousins to the sweet peas and the clovers and to a host of trees and bushes and smaller plants that we grow for food or flowers.

All of these plants which belong to the pea family have an ability which no other plants have. All plants, and animals too, need an element called nitrogen. There is a very great deal of nitrogen in the air, but neither plants nor animals can use it as it is there. It must be changed into another form before they can use it. But the plants of the pea family can take nitrogen out of the air, change it into the form in which it can be used, and then store it up in their leaves and roots; and when those leaves fall to the ground and decay other plants can use it. That's the reason the coffee grows better in the shade of those tall trees with the beautiful salmon-colored, pealike blossoms.

But that's not all of the story. The pea family can do that because it has formed a sort of partnership with certain little organisms, or bacteria, in the soil. These little bacteria find a home in the roots of the plants of this large family, and they do the work of changing the nitrogen of the air into a form in which it can be used by other plants and by the animals that eat the plants.

So God has planned that these things should work together in this wonderful way. Coffee trees need nitrogen. There is lots of it in the air, but coffee trees can't use it out of the air; so God provided other trees that could take it, by the partnership that those trees have with the soil bacteria, and change it into a form that the coffee trees could use.

God wants all of us to work together. He has given each of us talents to use for him; not all of us can do the same things, but together we can do a great deal. Others are dependent on us, and we are dependent on others. We must work together.

DEEP ROOTS

I was calling on a friend one day, and he took me out back of his house to show me some roots of an oak tree that he had brought in from the mountains. He had found them along the road, where they had been uncovered by the grading of the highway. The oak itself was a little tree, not over three feet in height; but the roots were longer than I am tall; and he had not got all of the root system, which was probably as long again as those he was able to get.

As I studied those roots I thought what wonderful things they are. We look at a great tree, or even a small tree; and we admire its beauty, its spreading branches. We enjoy its shade and its flowers and fruit; but we seldom think of that part of the tree which is underground—the part that holds up the great trunk when the winds blow, the part that draws the water out of the ground, laden with all those materials which are needed for plant growth, and sends it up through the trunk to the leaves, where it is changed into usable form for building bark and branches and solid wood.

The life of a tree depends on its roots, the part which is underground, and which we never see. Roots go a long way: some spread out over a wide area and draw their moisture from near the surface of the ground, while others strike straight into the earth and draw their supplies of water from down deep.

Do you know, boys and girls, that people have roots,

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just as real roots as do the trees and other plants? But, you say, how can they move around if they have roots? The trees have to stay in one place all the time. I didn't say that our roots are just like the roots of trees, but that they are just as real. Our roots go back into our homes, into our churches and schools, and into our friendships. You are sending down roots right now, roots that will supply you with strength all during your lives—the power to stand against the storms of temptations and difficulties which will come.

I have walked through the forest after a severe storm. Many trees were lying on the ground—alongside of many more already decayed there—trees whose roots had been torn out of the earth by the winds. They would die and be of no use, as the others had. What was the trouble? They had not sent their roots deep into the soil, but had spread them out near the surface, drawing their moisture from a shallow depth. Then when the storm came and the soil was wet and soft, the wind easily tore them out, and they fell. Many lives are like that. They have not sent their roots deep into the things which are eternal, into the things of God; and when the stresses of life come, they fall.

If you want to have strong, well-nourished lives that will withstand every trial and every difficulty and every temptation, if you want to be sure that you can hold your head high like a deep-rooted tree, you must sink your roots deep into God.

THE ROOT THAT GREW AMONG THE ROCKS

A MAN was digging a ditch along the street near the church. The trees in the parking had sent their roots out under the street, and when he came to them in his digging he cut them off and threw them out. As I was going by I noticed one of those roots. It was not like most roots. You know that a root is usually straight and round and tapering from the tree to the end. But this one was different. It was all twisted and out of shape. In places it was flat and thin; in other places it was like a dish; and in between it was all marked with small holes, and not at all round. It was one of the most peculiar roots I have ever seen. Now what do you suppose caused that root to grow in that way? As I examined it I noticed a small stone embedded in the wood. Here was the reason for the root's being so out of shape. The ground was so full of stones that it could not grow straight, so it wound its way between the rocks. But when it grew larger there was no room for it to grow as it should, so it was flattened out between the stones, and cupped over them, and in places grew around the stones so that one could not get them out without breaking the wood.

Now boys and girls, you are growing; and God has planned that you should grow in a certain way, the way that will be best for you, that will make you happiest and most useful. But sometimes boys or girls begin to grow among the

rocks, the rocks of bad habits, of evil companions. And when they grow among such things they can't grow straight and tall, but are twisted and all out of shape. Oh yes, their bodies may be very well developed, though they often show the marks of wrongdoing, too; but even if they grew as they should in that way, their spirits will be like that root which grew among the rocks, flattened and out of shape, with bits of stone embedded in them.

Your parents want you to grow as you should. That is the reason they send you to Sunday school and to church. That is why your Sunday school teachers are so careful to help you. They are trying to take the rocks out of your way, the stones that would make you grow crooked and bumpy and out of shape. They want you to be the men and women that God intended you to be.

THE TREE THAT BROKE A STONE

Which is harder, a stone or a stick? If you strike a stone with a stick, which is most likely to break? Up in the mountains where we spent several summers camping, there is a great stone several feet on each side. Right out of the center of that stone there is an oak tree growing, and the great stone is broken in two. What happened? Years ago that stone was one solid rock. Some dirt was blown into a hollow on top of the rock and an acorn fell into the dirt. When it rained the acorn began to grow. It sent its roots down, but they soon came to the solid stone. They felt around; and they

found a little crack, so small that you would never notice it. But the little roots began to grow down into that little crack, and they were just as flat as they could be. If one were to see them then, one would say, "What effect can these little roots have on that great big stone? It is so solid, and they are so weak." But when those little roots had got a good start, they began to grow thicker, and what happened? That great big solid rock was split from top to bottom.

You know that is the way bad habits grow in the lives of men and women and boys and girls. At first we are as solid as a rock; but along comes some of the soil of carelessness, which we do not bother to take away. Then some little wrong acts fall like seeds into that soil and begin to grow. They find a little crevice in our character which we did not know was there, and they send their roots down into that. We begin to know that they are there, but we say: they are so small, and I am so strong, and I rather like to have them there; let them alone. Then when we do not know it, those little sins that have got rooted in our lives begin to grow faster; pretty soon we can't pull them out, and before long they will have broken our lives. This is exactly what happens when boys and girls begin to drink alcoholic drinks. Before long the sin has broken their lives.

Paul said, "Know ye not that a little leaven leaveneth the whole lump?" A little root of an oak tree can break a great stone; a little sin can ruin a whole life.

THE TREE THAT SWALLOWED A CANNON

When we think of cannons, we do not ordinarily think of their being inside trees. We think of them as mounted on wheels, on railroad cars, on tanks, on ships, and on the walls of forts. But who would ever think of looking in the trunk of a tree for a cannon? I am going to tell you the true story of a tree that swallowed a cannon, that took it right into its trunk—a real honest-to-goodness cannon, an old Spanish cannon, like you read about in stories of pirates on the Spanish Main.

This cannon was on an old fort in Santo Domingo, right along the coast of the Carribean Sea, which used to be called the Spanish Main. It was there to protect the island from those pirates. But the pirates have disappeared from the sea, and the old fort has fallen into decay. When I visited it a number of years ago there was nothing left but the walls, all moss-covered, and with tropical vines climbing over them. Trees were growing out of the center of the fort, trees more than a foot through. The openings in the walls, where the cannons used to point out to sea, were still there. And all around among the trees, and overgrown with brush and weeds, were the old cannons. Some large iron ones were all rusted and useless. Others, smaller and made of bronze, might still be cleaned and used to send a ball out across the waters.

As I was looking around I noticed a tree out in front of the fort which had a peculiar appearance. Now I have a great curiosity for peculiar things, so I went over to that tree. It was about a foot and a half in diameter, and on one side it looked as if the bark had been peeled off in two places, and was just growing back. But when I examined it more closely I saw that it was not the trunk of the tree that was showing through the bark, but one of those small bronze cannons, one with about a three-inch bore. Someone had placed it against that tree, and the tree had immediately begun to swallow it. It was that kind of a tree. You have seen boys and girls who are always trying to swallow everything they can get their hands on. Well, this tree was like that. It would try to swallow anything that was near it. So when this cannon was placed against it, the tree began to grow around it. When I was there it had covered both ends of the cannon and had reached across its middle, as if to make sure that the cannon did not get away.

By this time I am sure that you would never know that there was anything inside that tree, just by looking at it. But some day a woodsman will try to cut it down, and he will strike that cannon with his ax. The tree will be of no use for lumber, and it will not be able to withstand the force of the hurricanes as well as it would if it did not have that cannon in it. The tree took something into itself which makes it forever useless to men and much weaker as a tree.

That is a great temptation that boys and girls have to meet. They are always being tempted to swallow cannons, to take into their lives things which don't belong there, and which will do them harm, just as that tree did. It may be that the thing that is taken in is entirely covered up and forgotten, but some day there will be the need for extra strength; then that thing will prove to be a weakness, a cause of downfall.

SCARS ON BARK

WALKING ONE DAY through a beautiful aspen grove in the high mountains, I noticed some peculiar scars on a tree trunk. Most of the trees reared their slender trunks high up into the air, their bark smooth and white and beautiful. But on this tree there were great rough, dark ridges. I examined the scars to see what might have caused this tree and one or two others that I noticed to be so defaced. The scars were long scratches; and the scratches were grouped in threes, on opposite sides of the tree trunk. When I saw that, I knew the story. Some years before, when the tree was smaller, some animal had climbed that tree in a great hurry, possibly seeking safety from some pursuing enemy. In its hurry it did not wait to sink its claws deeply into the bark, but climbed as rapidly as it could; and because of its hurry and its weight, its claws scratched down the bark until they were in deeply enough to hold. When the aspen tree heals a wound in its bark, it does so by causing a rough place to grow there. So these claw scratches are long rough ridges, which will get larger every year, even though they are completely healed over.

On a beautiful Douglas fir near our camp someone has thoughtlessly made a large gash with an ax. In time the tree will cover over that gash, unless decay starts; but there will always be a scar there to tell of that person's thoughtlessness. A few years ago I trimmed some branches from the linden trees in our yard. I watched, year after year, the places where

those branches were cut being covered over by the bark. They are all healed now, but the scars are there and will be there as long as those trees live.

We have a great many scars in our lives. Whenever we do injury to our souls, whenever we permit wild beasts like selfishness or dishonesty to climb over us, even though the sin is removed, the scars remain, and will remain. Sometimes it is just a thoughtless act that causes the wound; sometimes it is a necessary pruning of something that should not be a part of our character. The scars remain to tell the story.

If we want our lives to be pure and smooth and beautiful, we must guard against all those things which might cause scars to form.

A TONGUE OF FIRE

ONE DAY I was climbing a mountain in one of our national forests. I went up through the great trees, and as I walked along I thought, "What wonderful trees these are! How long they have stood here! What a wonderful God to plan things so beautifully, and then to have the patience to wait till they can grow so big and tall and strong!" Then I thought of what those trees could be used for: telegraph poles, to hold up the wires that carry important messages, messages of joy and of sorrow, of government and of business; the masts of ships carrying the commerce of the seas; lumber to build into houses, the homes of boys and girls. They could be

used for a great many useful things, and all because God had planned his world in such a wonderful way.

Then as I was climbing on up, thinking of these things, those great trees suddenly stopped; and I stopped too, for I saw a fearful sight. The whole mountain side above me was covered with trees, not tall trees with their green tips reaching up toward God, but trees all tumbled down and twisted and broken—some standing halfway up, most of them on the ground, crisscross and tumbled one over the other. They were not green at all, but barkless trunks, their limbs gone; and many of them were black.

Then I knew what had happened. Some one, a good many years before, had started a fire, just a little fire. Perhaps he was cold and wanted to get warm; perhaps he was hungry and wanted to cook a meal. More probably he was careless and dropped the end of a match or a cigarette. Anyway, it was just a little fire when it started. A little fire can't do much damage, can it? But a little fire can grow into a big one, and that is what this fire did. And see what happened. Those great, tall, beautiful trees that God had watched growing through so many years, so that they might be helpful to men, were just a jumbled mass of burned wood, good for nothing at all. No wonder the Forest Service, in its fire warnings in the National Forests, pictures fire as an angry red wolf racing through the trees.

I thought of what James wrote in his letter in the Bible, "Behold, how much wood is kindled by how small a fire!" Then he went on to say, "And the tongue is a fire." Is your tongue hot, does it burn your mouth, boys and girls? This is what he meant: you use your tongue to speak with; and if you say something bad about anyone, it is just as if you had



kindled a little fire up there in that forest that got loose and raced through the trees destroying everything before it. Evil words will burn up everything that is in their way, just as a fire does. But they do not burn up tall trees and beautiful forests; they burn up men and women and boys and girls. They destroy the lives of people, so that they cannot be beautiful and useful any more. Don't set little fires; don't tell things about people that aren't true—and even that are true, unless they are kind or absolutely necessary. You never know how far your little fire will run, or how many people it will hurt.

PART IV



LEAVES AND BOUGHS

"Took branches of palm trees, and went forth to meet him, and cried, Hosanna."

JOHN 12: 13.



GOD'S FINGERPRINTS ON THE LEAVES

I AM SURE you can all tell me what I have in my hand. It is a branch from an oak tree with its leaves. Do you know what the leaves are for? They make shade. They are beautiful to look at. Yes. But they are much more useful to the tree than that. Leaves are very wonderful things. They are just covered with the fingerprints of God. God's fingerprints are the things in the leaves that make us know that he made them; they tell us that these leaves didn't just happen. Oh yes, they grew on the oak tree; and some people tell us that the tree on which they grew gradually developed from a much smaller plant. It may have, I'm sure I don't know, and I don't believe anyone else knows all about it either. Men think and talk and study a great deal about such things, and they learn much. But after all it doesn't matter a great deal how these leaves were made, God has many ways of working; and we can be sure that, whatever men finally discover to have been the method by which trees and leaves came to be, it was God's method. God is not only an artist and a sculptor, a painter and a musician; he is also an engineer, a mechanic, a chemist, a physicist.

But we were going to look for the fingerprints of God in these leaves. Their shape tells us that they came from an oak tree. You could hunt all day and never find leaves like

these on an elm tree, or an apple tree, or any other but an oak tree. These leaves are like the identification cards that are made out for soldiers. They tell us to what family the tree belongs and to just what branch of the family. They say to everyone, "This is an oak tree, belonging to the very honorable tribe of oaks."

But leaves are more than identification cards. They are one of God's wonderful chemical labratories, doing many things that no chemist has ever been able to do. We hear that a scientist has made a great discovery. He has learned how to change certain things so that they will be more useful to men. What he discovers, God has been doing for millions of years. All that man can do is to find a way to imitate the work that is done in God's world. He can discover the laws that God has made, and then by obeying them he can do the same things.

But these chemical laboratories that are in the leaves do things that no man has yet been able to discover how to do. They make a coloring matter called chlorophyll that gives the green color to the leaves, and does a great deal of work for the plant. This chlorophyll works with sunshine and air and the solid matter that is brought to the leaves in the sap from the ground. It combines all these things and changes them into plant food; and this food is sent back into the trunk of the tree and out into the branches where it is built into the wood, the leaves, the flowers, and the fruit of the tree. When the leaves fall to the ground and decay, they make the ground richer for other plants to grow in. It may be that years later the trees are all cut down and the land is planted to wheat. Then the food that these oak leaves have made will be used by the wheat, and we will eat the bread that is made from the

grain. So the chemical laboratories in the leaves are working for us too.

When you look at the front of the leaf you see a great many little lines. If you turn the leaf over you discover that these lines are small ridges, all joined to a central ridge that runs through the leaf, and becomes the stem by which the leaf is joined to the tree. These ridges strengthen the leaf and make it stand out flat to catch the sunlight. But they do more than that. They are water-pipes through which the sap comes up from the roots, and through which the food that the leaf has made is carried back to the tree.

These leaves are so wonderfully made that no man has ever been able to make anything like them. God's finger-prints are in the whole plan of the leaf. Many old paintings have been identified by the brush marks of the painter, by the lines of the picture, or the kind of pigments used, rather than by the name on the canvas. So in the coloring, the design, the workmanship, the purpose of these leaves, we recognize that they are God's handiwork.

WHY LEAVES ARE GREEN

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What is it that makes the lawns and the trees and the hillsides so different in the spring and summer from what they are in the winter? That is easy to answer. It is because they are all covered with green at those seasons of the year, while in the winter everything is brown and bare. Isn't it wonderful to get out into the country when everything is putting on its new dress? We enjoy the fresh green of the slopes on the hills, the unfolding leaves on the trees, and the lawns all carpeted with grass. Green is easy on our eyes in the bright light of the sun. We like the shade that the leaves provide, and we enjoy the soft grass under our feet.

Did you ever stop to wonder why the grass and the leaves are green rather than some other color, and just what that green coloring matter does for the plants?

I will tell you. The leaves, like the rest of the plant, even the solid trunks of the trees, are made up of tiny cells, most of them so small that they cannot be seen without a magnifying glass. The cells in the leaves have in them some very small bodies, so small that many of them are in each cell. These bodies have in them a green coloring matter called chlorophyll. Now that is rather a hard word to remember, but that is its name. Chlorophyll is very important. It does a lot of hard work for the plants, and for the animals, even men, who eat the plants. It uses the air that is around the leaves, and the water that is brought up from the roots through the trunk and stem; and with the sunshine it changes these things into plant food—starches and sugars and carbohydrates. These foods are used to build up the leaves themselves, the branches, and the flowers and fruit of the plants.

Now here is where the green coloring matter is important to us. If it were not for those little bodies in the cells of the leaves with their chlorophyll, we could not live.

When God made the earth he said: "Let the earth put forth grass, herbs yielding seed, and fruit-trees bearing fruit after their kind." And God said to man: "Behold, I have given you every herb yielding seed, which is upon the face of all the earth, and every tree, in which is the fruit of a tree yielding seed; to you it shall be for food."

God created the plants with their green leaves, and their cells with the green chlorophyll, so that they could take the elements that are in the air and the water and turn them into food for the plants, and so that the plants would furnish food for the animals and for men.

But we owe to this green coloring matter more than just our food. Our clothing also depends on it. The fibers which are spun and woven into cloth comes from these same cells. The wool and leather are products by animals which feed on the plants. More than that, the lumber in our houses is made from the trunks of the trees that are built up by the food supply by these little green bodies in the leaves. And as if that were not enough, in the long centuries that are past the coal that keeps us warm in winter was formed in the ground by the bodies of plants that had been made to grow in this same way.

Truly, the green leaves are wonderful things. They show us the love of God for men. For God made them, made them to be the wonderful food-factories that they are, supplying food for plants and animals and men, supplying also the materials for our clothing and for our homes. These leaves show the wisdom of God, for he planned it all—oh so long ago—and that green chlorophyll has gone on working, making food, and lumber, and fibers through the years. It took men many years to discover what I have told you makes the leaves green, and even yet they do not know just how it does its work. But God knows; he planned it all, which shows that God is much wiser than men. Here in this green coloring matter we see the fingerprints of God.

GOD'S ARTISTS

I AM SURE that every boy and girl likes to get out into the mountains in the fall of the year; that is, if he likes to see the mountains in their most colorful dress. It is fine to get out at any time; but in the fall, when the leaves are turning, it seems to me that nature out-does herself in brightness.

One fall I had to make a trip up over a high mountain pass during the latter part of September. It was at just the time when everything was most resplendent. The tops of the highest peaks were already covered with new-fallen snow. Then came the timber-covered mountainsides, dark green with the foliage of the pines and firs and junipers, contrasting with the white of the higher altitudes. In every ravine and canyon and high mountain valley were the aspens shining out of the dark background of the pines like golden ornaments. Our trail took us up a valley filled with aspens, whose white boles were close on either side and whose branches met overhead. The sun shining through, reflecting from the leaves, made us think we were in a great room whose golden ceiling was supported on smooth white columns. Farther down, on the flanks of the mountains, where they met the valley floor, were the oaks. An early frost had touched their leaves; and there were all the shades of brown and russet and red that one could imagine, like a great Persian tapestry spread over the ridges; and here and there, as if the artist had sought to out-do him-

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self, was a flame-colored bush calling to one to turn aside and see this thing which God had so marvelously prepared.

Did you ever think as you enjoyed the coloring of the leaves in the autumn, how it comes about that green leaves can take on so many hues? Did you ever wonder who it is that paints all those leaves, and combines all those brillant colors which you enjoy so much today, and which have faded and are fallen to the ground a few days later? He must be a very ambitious artist, and one who loves his work, to do it and then let it fade away. Wouldn't you like to catch him out on the mountainside sometime with his paint pots and brushes, as he goes about his work?

You may explain the coloring of the mountainsides as the effect of the early frost on the chlorophyll in the leaves. You may say that it is just a matter of chemistry, that no artist is connected with it at all. Oh yes, there is. For it took an artist to plan it and to so arrange the combinations of colors that they would harmonize into one great scheme of beauty; an artist who sees it all from the beginning, and plans it all with a purpose. There is no reason for those leaves taking on all those beautiful colors before they fall to the ground and die, except that they might add one more touch of beauty to the world for the enjoyment of men. And the artist who paints the autumn leaves does it for our sakes. That artist is our God, and we see his name signed to his work, in every leaf that he has colored.

THE GLORY OF THE FAILING LIGHT

DID YOU EVER stop to think how many of the things that we enjoy most, the most beautiful things, the things that give us the greatest pleasure, are what they are because of some lack in them?

We were hiking high up in the mountains late one fall. The leaves were nearly all gone from the aspens and the oaks, where a few weeks before were canopies of glorious color. The golden yellow and the reds and russets and browns that made the whole mountain side one great Persian carpet of beauty, had faded and fallen to the ground. All we saw as we looked up was the bare branches against the autumn sky, and we were reminded of the fact that winter was not far off. But as we climbed the trail, our eyes were constantly being attracted to the small plants along the path, plants that would be hardly noticed at any other season of the year. Now, because they grew close to the ground and were somewhat protected, they still wore their leaves, now changed to gorgeous hues. The wild rose plants, many of them not over six inches in height, and the wild geraniums were dressed up in their best. The leaves were all the shades that one can imagine, from deepest green through bright yellows and golden oranges to darkest reds, in places almost purple. We couldn't help exclaiming over them and calling each other's attention to them. And along with the roses and geraniums were dwarf choke cherries, wild strawberries, yarrow, and many others.

How did these little leaves, a few weeks ago just as green as could be, change into all those wonderful colors? I have often wondered at that myself, and just a few days ago I learned how it comes about. It is caused by the failing light of the declining sun. As the days get shorter in the fall the sun is farther south, and it does not penetrate the woods with as much light and warmth as in the summertime. If the leaves are to continue green they must have lots of light, in order that they can make the chlorophyll which gives the green color. When the amount of green begins to fade the yellow that is always there shows through. In some cases the failing light changes the fading green into brilliant reds, and the oranges are a combination of the reds and yellows. The autumn woods are beautiful because of the failing light. It is the lack of something that is necessary for their best growth that brings out these colors we all enjoy so much. It is as if God in planning it all said, "The leaves will all be gone and cannot give the pleasure they give in summer, but before they go we will transform them into an even more beautiful thing that they may be remembered through the cold bleak days of winter." They are dying, but in the dying they are glorious.

How often the most beautiful lives we know are lived by people who have some great lack. Their bodies are deformed or wracked with pain, they have heavy burdens to bear, they must suffer hardship and privation; but in these conditions there shines through something that is wonderfully beautiful. Souls that otherwise might be lost in the vigor of a strong body and an easy life are strengthened by the failing light and become more and more wonderful.

THE END OF A BRANCH

As I look out of my study window in the wintertime I see the tracery of the branches across the sky. In the summer those branches were covered with leaves, but now they are all bare. As they sway in the wind they are apparently lifeless, and one wonders whether they can ever be leaf-covered again. But next summer they will be just as green and beautiful as ever.

Why do we know this? Because all up and down those branches, and especially at the end, there are buds. You can see them even from the study window if your eyes are good. The one at the end of the branch is the largest of them all, and it is the one that I am thinking about today. It is a marvelous thing, that end bud. The other buds, most of them, will produce leaves, or flowers with fruit; and next fall they will drop to the ground; not so that end bud. Within that little, brown, scale-covered bud is enfolded the whole growth of that branch. It may be inches, it may be feet, or even yards of new branch, reaching out, and dividing, and producing leaves and blossoms and fruit through many years to come. Within it also are other buds, buds which will remain asleep within the branch, possibly through many years.

A few years ago I cut off the ends of the branches of some small trees in the yard, because I wanted them to branch out so that they would make more shade. The next year, right up close to where those branches were cut off, new

branches came out and grew several feet that first year. They came from buds that had been embedded in the branch, but which would not have grown except for the need caused by my cutting off the growing point.

When I was a boy I used to drive the cows to pasture along a road where some great walnut trees grew. One spring, after the trees had put out their tender green leaves, and the pastures were beginning to grow, a heavy frost came which killed the leaves. In the place of those leaves which had been so green and beautiful the day before hung blackened masses of foliage. I wondered what would happen. Would those trees be without leaves all summer? and what about next year? would the trees ever have leaves again? A week or so later as I was going along that road I noticed that the trees were becoming green once more. All up and down the branches, and even on the large trunks, leaves were appearing. Buds that apparently had been forgotten and were buried deep in the bark of the tree were pushing out to take the place of the growth that had been killed. Those buds had been in that bud at the end of the branch, long ago, when the trees were much smaller. The need of the trees and the warmth of the sun made them grow.

As I watched the branches across the sky from my window and thought of the marvelous thing that is at the end of the branch, I thought how like that we are. There is something within each of us that is asleep, which may be unnoticed, but which if brought into the right relation to Christ, will grow and blossom and bear fruit in a wonderful way, and which, even though it is frozen down, will come out again. How wonderfully God has made the trees, and how wonderfully he has made our souls.



CLINGING FINGERS

Have you ever noticed how a vine climbs a tree or a wall? It is very interesting to watch vines grow. One evening I was looking at a vine growing on the wall of the church. I noticed that the growing point was just at a crack between the stones. Two hours later I looked at it, and it had grown three-quarters of an inch in that time. It doesn't grow that fast all the time, but seems to reach out in the evening more than during the day. This particular vine, the American Ivy, clings right to the stone. It has little hands with fingers; and on the finger tips are little suckers which fasten on to the stone, so that if one tries to pull the vine off, the hands will break but the fingers will not let go.

There are other kinds of climbers. The grape, and many like it, sends out tendrils which wind around the support and hold the vine. Then there are those like the bean, which twine themselves around the string or wire. The growing point moves slowly in a circle and so wraps itself around anything that happens to be in the way. Sometimes several morning-glory vines twine themselves into a regular rope in this way.

There is a peculiar thing about the American Ivy or Virginia Creeper. If it grows along a fence the little hands twine about the wires and serve as tendrils, but if it grows along a wall it grasps the stone with the suckers on the ends of the fingers.

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As one studies these growing vines one is impressed with the provision that is made for them to climb. Each is suited to the particular condition under which it grows best. Beans and morning-glories are twiners, as they grow among the corn or some similar place; grapes are best fitted to wind their tendrils about the wires, and the American Ivy to cling to the wall. How did it come about that each is fitted in this way? Who planned those clinging fingers, those winding tendrils, those slowly circling growing points? The best explanation of it is that God planned it in his wisdom, that each might be fitted to grow in its own place. So God plans all his work and prepares all his creation for its life. And so he has prepared us, and fitted us best to do his work and enjoy his world.

GALLS

DID YOU EVER go out for a picnic in the summertime and discover, after you had your lunch all spread out under some great oak tree, that there were millions of little gnats about, so many that you had to move your picnic ground? I have, and it is not a very pleasant experience. Do you know where those gnats come from? Probably not, but I can tell you. They come from certain swellings on the oak leaves and branches which are called galls. Oaks are not the only trees that have these swellings. They can be found in some form or other on almost every kind of plant there is. They are very common on wild roses, on cottonwood trees, on many grasses and weeds. They are formed on the leaves and twigs and

even on the roots. Most plants produce several kinds of swellings, according to the kind of insect that lives in them. There are more than fifty kinds formed on the willow trees, and the oaks produce over three hundred different galls.

These galls are the houses in which the larvae of certain insects hatch out and live. It used to be thought that the trees themselves produced the insects that lived in the galls, just as they produced fruit. I have talked with many grown men in Puerto Rico who insisted that certain trees produced flies, and pointed to these galls as proof of what they believed. One scientist, many centuries ago, thought that the insects laid their eggs in the ground and that the plants took them in with the water through the roots and carried them up with the sap to the branches and leaves, where they hatched out.

Now we know that the insect lays its eggs on the leaves and stems, and then does something to the plant, whether by stinging it, or in some other way, we do not know, with the result that a gall is formed and the eggs are on the inside. When these eggs hatch the gall furnishes the food for the grubs until they are ready to be changed into the full-grown insect. A different gall is formed by each insect and on each plant; so there are many, many kinds of galls. Most of them are ugly and of no use. Some of them that are formed on the rose stems are rather pretty until they become dry and hard. A few of the oak galls have been used in making dies and in tanning leather.

Galls are one of those peculiar provisions of the natural world whereby one form of nature furnishes a home and food for another kind. The insect selects the place on the leaf or stem, and the plant produces the gall in that place. It is one of those arrangements which tells us that God has

planned his world so that the many parts work together, helping each other. We may not be able to see anything beautiful or useful in these galls, and in the gnats which come out of them; but that is because we do not understand everything there is to know in the world about us. But this we can know: that in God's world everything has its place, that because we are God's creatures he has a place for us, and that if we are to do the work he has planned for us we must work together, helping each other.

TAKING ROOT

ONE SUNDAY in early spring someone brought some pussy willow branches to the church. We took some of those branches and put them into the ground beside the doorstep leading into the study. A few of them died, but others began to grow, and before the summer was over they had roots going down deep into the ground. Your mothers often take pieces of foliage plants or roses or other flowers and put them into the ground, where they take root and make new plants. In some places where the soil is wet I have seen the posts that were set for fences all covered with branches and leaves. They were taking root; and if left alone, they would produce a long line of trees.

Not every piece of a plant or tree will take root and grow in that way. It must be put into the right kind of soil conditions, and with the proper amount of moisture. Otherwise it will die.

Isaiah, the prophet, speaking of the remnant of Israel that would be left in the land after the nation had been taken captive because of the sins of the people, said: "And the remnant . . . shall again take root downward, and bear fruit upward." He was thinking of this thing of which I am speaking. Probably he had seen the shepherds stick branches of the willow into the mud about the springs where they brought their sheep to drink, and had noticed how the branches took root and started to grow. So, he said, it would be with the few people that were left in the land. They would take root and grow and bear fruit. They should once more become a mighty nation if they were in the right relationship to God.

You and I know people who have no deep roots for their lives. They never go to church; they do not stand for anything that is right; they think only of money and pleasure and themselves. When temptation comes, they are easily led to do things which are sinful. Then we know other people who can be counted on to do what is right at all times, who can be found in the house of God, whose lives are a blessing to those around them. They are happy, and they do a lot of good in the community. They have taken roots down deep in the great truths of God, and their lives are bearing fruit upwards. Which kind of life do you want?

GROWING IN THE DARK

A friend of mine dug a cellar under his house so that he could have a furnace. In digging out the ground he cut the

roots of some trees that were spreading under the house. One day he asked me to go with him to his cellar, as there was something that he wanted to show me. The end of that root, down there in the cellar, had begun to grow. It had sent out branches, and the branches had leaves on them. Now this is the peculiar thing. Those leaves, instead of being green like the leaves on the tree out on the lawn, were nearly white. Do you know what made the difference? Did you ever go to the cellar to bring your mother some onions or potatoes that had been there for some time, and find that they had begun to grow? The potatoes had sent out long sprouts, and that onions had tops, just like onions in the garden, except that they were white. Do you know why they were that color? I'll tell you. It was for the same reason that the leaves in my friend's cellar were white-because they had grown in the dark.

If plants are to grow properly, they must have sunshine; otherwise they will have no color, and will not be strong and healthy. I don't know whether anyone has ever tried to grow potatoes in a cellar, without light, but I don't believe that they would develop there.

Down in the caverns in Kentucky there are some small lakes. They say that the fish in those lakes have no eyes. They have lived for many generations in absolute darkness, and have had no use for eyes; so they have lost them entirely. If boys and girls are to grow as they should, they need light, lots of clear sunlight. Do you know that children who live in the cities where the buildings are tall and the streets are narrow, and where there is lots of smoke in the air so that what little sunlight may come in is dimmed, are not so healthy

as the children who live out in the open where they can have plenty of light?

We need the light of the sun if we are to grow and be strong men and women, and we need the light of Jesus Christ if we are to be strong spiritually. If a person does not have the light of Christ, he is like the leaves growing in my friend's cellar, weak and colorless. I am sure that none of you children want to grow like that. Jesus said, "I am the light of the world: he that followeth me shall not walk in darkness, but shall have the light of life." Let us walk with Jesus in the light that will make us grow strong.

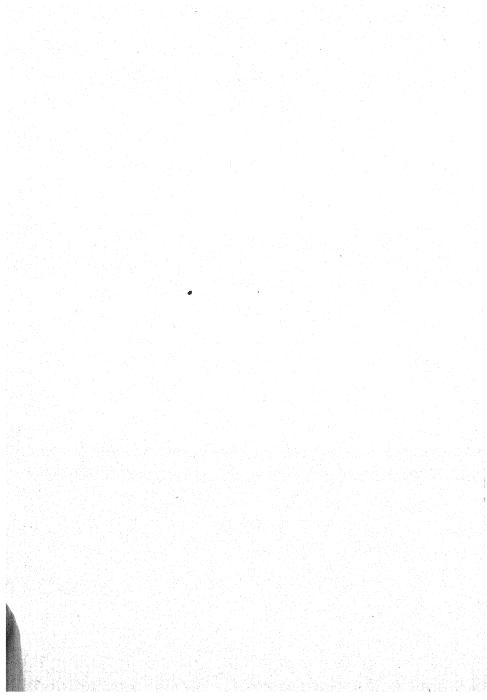
PART V



FLOWERS AND SEEDS

"For, lo, the winter is past, the rain is over and gone; The flowers appear on the earth."

Song of Sol. 2: 11, 12.



THE FIRST FLOWERS OF SPRING

ONE WARM DAY in early spring I was out in the mountains. The grass had not yet begun to grow, and there were no leaves on the trees; but there on the ground, where everything else was brown and dead, were some beautiful blossoms of the anemone. During the winter their roots had lain in the ground as if lifeless; when the first warm days came there was an urge to new life, and up came those beautiful flowers, even before there were any leaves showing. That is one of the wonderful things about the spring of the year. In the winter all is bare, and nothing is growing. Then almost before we know it we are surrounded by flowers blooming everywhere. The trees are out in leaf; the lawns are all green. It has all happened so silently and so gradually that we have scarcely noticed any but the very first signs of their coming. New life has taken hold of the world and transformed it from an apparently lifeless thing into a thing of beauty and life.

Out in the southwestern part of the United States and down in Mexico there is a plant that is called the resurrection plant. It is called that because in the dry season it becomes as brown and lifeless as any dead weed. It rolls itself up into a ball and blows about in the wind. Then when the rains come, if it is in a place where the roots can get moisture, the

leaves become green and straighten out once more, and the plant goes on growing. These plants are often sold to tourists as they travel through the country.

High up on the mountains of Switzerland there is another plant that grows right at the foot of the glaciers. In the spring of the year when ice is still covering the ground, these plants send out blossom buds; and in growing they give off heat, melt their way through the thin ice, and open up their flowers above the ice that is all about them.

It is a wonderful thing to see the return of life out of these seemingly impossible conditions, drought and cold. But it comes in response to the influence of water and warmth and light as the more favorable season approaches.

Out of the unfavorable condition of a sinful world God brings new life to men through Jesus Christ. He is the water of life. He is the light of the world. In the presence of His love we are warmed and made to grow, till we, too, can bring forth beautiful blossoms even though we are still surrounded by the temptations that would otherwise make such lives impossible.

GOD PAINTS A TULIP

ALL ABOUT the town in the early spring one of the most frequently noticed flowers, and one of the most beautiful, is the tulip. To me it is one of the loveliest flowers that bloom.

Did you ever watch a tulip open? If you have never done so, you have a great treat in store; for if you watch it

carefully, two or three times each day, from the time it is a little dark green bud until it is a beautiful, colored flower, you will see how God paints the tulips. Yes, God does it. How? I don't know, but I know that He does it, for who else could? Oh yes, there are artists who can make beautiful pictures of tulips on paper or canvas, pictures that look very much like the beautiful flowers of the garden; but who ever saw an artist who could paint one of those delicate flowers as it grows?

I used to think that those green leaves that form the bud were the calyx or cover of the flower, and that they were just pushed back as the blossom opened up. But one spring we watched the process carefully, and I discovered that I was wrong. We watched the bud getting larger and larger each day, and wondered when the colored petals would appear at the tip. They did not appear, but we noticed that those green leaves were changing color themselves. They were turning a bright red, and growing larger as they opened up. And when the flower was fully blown the green was gone and the whole blossom was beautifully colored. We watched another one open up to make sure that we were right. This time the green changed to a creamy white, and then to our surprise we saw on the edges of those creamy blossoms a line of red all around the border. We watched others, and some turned yellow, and some a deep purple.

What a wonderful change took place in those dark green buds! What was it that made them change from a thing of little beauty to a wonderful flower? Was it the soil, the rain, the sunshine? Possibly all of these had a part in it; they were the brushes in the hand of the Master Painter. But what made each flower come out a different color, and who put that

delicate bordering of red around the creamy white cup? Someone will say that it was just the nature of the plant to do it. Yes. But who made the plant to grow in that way, who planned it all, who thought out that wonderful transformation? I'll tell you. It was God. It is God who paints the tulips, and all the other flowers. Isn't He a marvelous painter?

Just as God makes the flowers beautiful, transforming the dark green of the bud into the colorful beauty of the flower, so will he transform our lives and make them beautiful if we will but follow his will. We said that the tulips grow that way because it is their nature. Do you know that God has planned just such beautiful things for us? The reason the tulips are beautiful is because they grow according to God's laws. They obey his will. If we are obedient to what he wants us to be, we, too, will be made beautiful in our lives.

THE LILIES

I had a wonderful experience during this past week. I watched this beautiful flower unfold. If you have never watched an Easter lily open up, you should try to get the opportunity. At first there was just the bud, a long green thing that looked a good deal like a rolled leaf—no beauty of shape or form. Then the end of the bud began to get larger, and pretty soon the petals turned back opening up into this beautiful blossom. But there was another wonderful change that took place at the same time that it was opening up. The

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green became lighter and finally turned to this glossy white.

Do you think that you could ever make anything as beautiful as this flower? People dress themselves up and take a great deal of pains to make themselves look nice, and spend a great deal of money in doing it; but I never yet have seen one that could compare for beauty with a lily. Jesus was speaking to the multitude one day, and he wanted to teach them to trust in God. He said: "Consider the lilies of the field, how they grow; they toil not, neither do they spin: and yet I say unto you, That even Solomon in all his glory was not arrayed like one of these." Solomon was a great king who had a splendid court. He tried to dazzle people by his wonderfully beautiful garments of velvet and gold, all encrusted with jewels; yet, Jesus said, in all his glory he was not so beautiful as this flower. Who gave the beauty to the flower? Did it paint itself? Did it work hard for its beauty? Did it try to make itself over into something that it was not? You say it just grew. Yes, it just grew that way, but it grew that way because God planned that it should.

You remember that I said that at first it was just like a rolled-up green leaf, and was not very beautiful; but when it opens up and shows what is within, how lovely it is, how pure! Real beauty is not put on. Solomon—and a great many people today are like him in this—tried to put beauty on the outside. But real beauty must be on the inside first, in the heart of the person, as well as in the heart of the lily.

Jesus in our hearts is the only one who can give this beauty inside; and when he has made us beautiful in our hearts, then we can't help letting it be seen in our lives.

LIFE THROUGH DEATH

DID YOU EVER stop to think where the beautiful flowers of spring come from? You say they come from the seeds that have been in the ground. Perhaps you planted them last fall, or possibly they just fell to the ground and have been there all winter. Do you know what becomes of that seed that is planted? Did you ever dig down into the ground to try to find the seed after the plant had come up and was blossoming? If you did, I am sure you did not find it. You may have found a bit of its hull, but the seed was gone. It gives itself that the flower might appear and bear fruit.

If you kept that seed in a dish, without warmth or water, it would continue to be just one seed. When the Egyptians buried a king hundreds, yes thousands, of years ago in a wonderfully built tomb at the edge of the desert, they thought they had to provide food for his spirit as it journeyed on the way to the other world. They put wheat in jars and sealed them up. Then the desert winds buried the tomb under the sands so that no one knew that it was there for many, many years. After a long time someone discovered it, and when men went in to see what was there they found those jars of wheat. There was just as much wheat as had been put there in the first place, but not one grain more. In all those years it had not increased a bit.

Wheat will not grow unless it is put into the ground and watered and warmed. And then the grain itself disappears,

but in its place comes up a new plant. The new plant doesn't look like the grain of wheat; it is much larger, and different in shape and color, and it produces many grains of wheat. But the grain that is planted is lost; you can never find it again.

Jesus said, "Except a grain of wheat fall into the earth and die [lose its shape and existence as a grain of wheat], it abideth by itself alone; but if it die, it beareth much fruit."

Today is Easter, and we read the news of the empty tomb. The place where they laid the body of Jesus is empty, and the grave clothes are folded away. They are like the shell of the seed planted in the ground. The seed itself has grown into a wonderful new plant. Jesus has come out of the tomb, but not as the same body that was put there, for that body has disappeared; it has been transformed into a glorified body, a body that will go on forever. While Jesus was on earth he was just one person, in one place at a time. He could speak to one group of people, and heal the sick folk of just one place at a time. Now he is everywhere at once. By dying He gained new life, a greater life. And what he did we will do if we have the Christ life in us. This is the truth that Easter teaches us: that if we trust in Christ, our lives will be richer and better than ever before. It is true that we will lose the old life, the life surrounded by the shell of sin and imperfection, but we will gain that new and beautiful life which is eternal.

WHAT'S IN A BUD?

IF SOMEONE were to ask you what is in a bud, what would you say? A flower? Leaves? Fruit? Yes, these things are in buds. And it is interesting to take a sharp knife and cut through a bud and look at the section, and if you have a microscope it is more interesting still. The other day we took a rosebud and cut through it. The outside was green and hard, but inside that rough green covering were packed in the most wonderful order all those red petals which would have opened up into a beautiful rose. In the very center was a little yellow spot. Now to us the flower is beautiful because of the petals, and we like it most for its beauty. But to the plant the petals are only a help in attracting the insects which carry the yellow dust called pollen from one flower to another. The important part is in the center. There is in that tiny yellow spot in the center of the bud far more than any of you ever dreamed. There are the pistils and stamens. Down in the pistils are the little seeds, which will grow if the pollen from the stamens falls on the top of the pistils and makes its way down to where the seedlets are. Yes, all of that is in the bud.

Did you ever sit looking at something and begin not to see that thing, but to see beyond it to something else? As I sat looking at that little bud and its center of yellow where those little baby seeds were, I could see down in the heart of that rosebud, not only what I have told you, but those seeds

growing and becoming other rose plants and bearing other roses—a whole rose garden in the center of that little rosebud.

If you take the bud of the apple tree and look into it, you can see a whole orchard heavy with apples, if the eyes of your imagination are good enough. When orchardists want to produce a certain kind of apple, they do not plant a seed and wait for it to grow into a tree. That takes too long; and sometimes the seed has been started growing by the wrong kind of pollen, and the apples are not what the orchardist wants. But if he takes a bud from a tree that bears the kind of apples that he wants, cuts a place in the bark of another tree, and carefully places that bud in the opening, it will begin to grow, and will become a great branch bearing fruit. Now the tree on which that bud was placed may have been an entirely different kind of apple tree, but all the fruit that comes from that branch will be of the same kind as the bud. In other words, that great branch and all its leaves and blossoms and fruit, for as many years as it continues to grow, were all in that tiny bud, that little green thing grafted into the bark of the other tree.

A bud is truly a wonderful thing. But it is not nearly so wonderful as He who made it; for God planned, in the very beginning, that buds should be just such things as they are. When you look into the heart of a rosebud, if you can see far enough, if you have the eyes of faith, you can see God.

No wonder the ancient prophets of Israel, when they wanted to speak of the coming Savior, and of what he would do and be in the world, likened him to a bud, that though it is small, grows and brings forth fruit and is a blessing, that contains somehow within itself all that afterward grows out of it.

THE YUCCA AND THE MOTH

DID YOU EVER hear of a partnership between a plant and an insect? You say, that is a funny kind of partnership. Yes, it is; but I want to tell you of one that is very interesting. In the early summer in the southwestern part of the United States there are many yucca plants in blossom. They are very beautiful standing out on the hillsides with their tall spikes filled with waxy white flowers glistening in the sun. Next fall those spikes will be filled with large seed pods, or capsules, one taking the place of each cup-shaped flower. These pods have thick walls, and inside are hundreds of round, flat black seeds, all neatly packed into tubes. If you examine those pods, you will find that scarcely one of them that is fully developed is without worm holes in it. You think the seeds will be all eaten full of holes and will never grow. But you are wrong. Most of them are in perfect condition; for the worm does not feed on the seeds, but on the fleshy part of the pod. And what is more, the plant grows that thick pod just for that purpose, for those worms to eat.

Now that sounds strange, but it is true. That is where the partnership comes in. It is one of those things which shows how carefully God has planned his creation so that even things so different as the yucca and the moth help each other.

The blossoms of the yucca hang down; and because of the shape of the flowers, like inverted cups, it would be almost impossible for the wind to pollenate the flowers. But when the yucca is in blossom one can see a moth busily working in the flowers. But, you say, insects work in many flowers. Yes, but this particular moth is different. Most insects carry the pollen from one flower to another accidentally. But this moth is doing it intentionally. It takes the pollen from the pistils and deliberately puts it on the stamens so that the seeds will become fertile and the seed pods will develop. And in order that this moth can do its work better, its mouth is shaped in a peculiar manner.

The yucca plant is so dependent on the work of this moth, that unless it does its work the seeds will not be formed at all. So, in order to repay the moth for its work, the plant grows a thick seed pod as food for the larvae of the moth. The moth lays its eggs in the capsule around the seeds. They hatch out and feed on this capsule, never touching the seeds themselves, until they are grown.

This is the partnership between the moth and the yucca. The plant provides the food for the larvae of the moth, and in turn the moth carefully pollenates the flowers of the plant. Each one serves the other, and each receives a benefit from the partnership. The more we know about such things, the more wonderful we know Him to be who planned it all.

Just as He has made the other creatures in his world to work together and to help each other, he has made us to be of service, one to another. He has given each of us some special ability so that we can serve others in that way. He expects each of us to benefit by the help we receive from other people. This is what Paul meant when he said, "Bear ye one another's burdens, and so fulfil the law of Christ." God's world is a co-operative world; and if we are to have



the best life, we must work together with other folk in carrying out God's plan.

THE POPPY PEPPER-SHAKER

You all know what a pepper-shaker is, I am sure. If I were to ask you to tell me what it is like, you would probably say that a pepper-shaker is a little glass or china container with small holes in the top, so that when you turn it upside down and shake it the pepper will come out through the holes. The little holes scatter the pepper so that it will not all fall in the same place. We use the pepper-shakers on our tables without thinking a great deal about them until the holes get stopped up. Then we are put out because they do not work. We take them for granted, never thinking that someone a long time ago invented this very useful little contrivance.

But do you know that long before men invented these things that we use on our tables the same idea was in use in nature, not to scatter pepper, to be sure, but to scatter the contents of the container, which happened to be seed?

If you go out into the garden late in the summer and find the place where the large oriental poppies were blooming, you will not find any blossoms; but you will find on the top of each tall stem where the blossoms were a very interesting arrangement. I call it the poppy pepper-shaker. It is the seed capsule of the poppy plant. It is shaped something like a small vase. The top is entirely sealed over with a more or

less flat disk, the edge of which extends beyond the vase and is scalloped, the scallops standing out like the petals of a flower. Inside this capsule are thousands, I believe one could say millions, of little black seeds, so small that they look like grains of pepper. They are not all in one compartment inside the capsule, but separated by many divisions meeting in the center and running from top to bottom. Now all this is not so different from what one finds in most seed capsules. But there is another thing which makes this the pepper-shaker. You remember the pepper-shaker has small hloes in its top to scatter the pepper. Well, so has this capsule only the holes are around the edge, under the scallops of the top. Under each scallop is a little hole that you would hardly notice until you looked for it. There is one of these little holes at the top of each of the divisions inside the capsule.

These capsules grow upright on the top of the flower stems; but when the wind blows and the stalk sways back and forth, it throws the seed out of the little holes, and the scallops above the holes help to scatter the seed still more.

Isn't that an interesting way nature has of making sure that the seed will not all fall in the same place? It is one of those things which show us the glory of God in his creation. The poppy seed pod has the marks of his fingers. They show the thought and the design of God in preparing this plant for its place in his world.

(If possible, a poppy seed capsule should be passed around among the children while the story is being told.)

PLOWING IN HOPE

As one goes about the countryside in the spring of the year, in nearly every field one sees the newly turned earth. In many of them men are at work, some with horses, others with tractors, turning over the ground. A newly plowed field is a beautiful sight to see. The weeds and grass and stubble are all out of sight. The brown earth lies in straight, even furrows; and where the work is well done the field is smooth and clean. But do you suppose that the farmers are plowing the ground just to make the fields look nice? No, you say, they are plowing in order that they may plant seeds in the ground. But that's a funny thing to do, isn't it? Pay money for grain and then bury it in the earth? Wouldn't it be better to keep it and feed it to the horses and cattle and chickens?

They are not plowing just in order to plant. They are looking much farther along than that. They are looking to the time when that smoothly plowed field will be all green again with the growing grain. And even that is not all that they are looking forward to, as they follow the plow around and around that field. They are thinking, "Next fall I hope to get so many bushels of grain, or potatoes, or so much alfalfa from this ground that I am plowing now." I have seen men, after plowing a field, go through and instead of planting seed plant small trees. If we were to ask them what they expect to get from those trees next fall, they would say, "Nothing. But five years from now I expect to get a good crop of apples

from these trees. It takes about that long for them to begin to produce well." Possibly as they plow they are thinking beyond the crops, to what they will do with the money they will get for them.

As they go about their work in the spring of the year, they are plowing in hope. Paul, the great apostle, in writing to the Corinthian church about one's expectation of reward, says, "He that ploweth ought to plow in hope of partaking." That is the reason the farmer plows the ground. He is looking forward to that time when he will receive the harvest.

We are not all farmers; but we are all cultivating fields, the fields of our own lives. We are preparing the ground now in order that we may enjoy the harvest at a later time. The farmer thinks of the harvest in the fall of that same year, or possibly several years away. Boys and girls think of the time when they will be men and women, when they will receive the benefits of their days spent in school or under the direction of their parents. You are plowing in hope, and your fathers and mothers are plowing in hope. You are expecting to enjoy the fruits of your studies and preparation, and they are hoping to rejoice with you in your joy.

GOD'S PROVISION FOR HIS PEOPLE

When you boys and girls come into the house from school or from play, what is the thing you say first, most often? Isn't it, "Mother, I'm hungry"? And what does mother do? She gives you a piece of bread with butter and jam

or jelly, doesn't she? When you came into the house you felt sure that there would be something there for you to eat, even though you had not thought of seeing about it before. You left that to father and mother to see about. You asked for bread, and they had it ready for you. Perhaps mother baked it; perhaps it was made by the baker and brought to the house; but whoever made it, you ate it and thought how good it tasted. But did you ever stop to think where that bread really comes from?

How many of you know that little verse written by Dr. Maltbie D. Babcock:

"Back of the loaf is the snowy flour,
And back of the flour the mill,
And back of the mill is the wheat and the shower
And the sun and the Father's will." 1

Yes, it is God who provides the bread for us. Away back in the very beginning of the Bible it says, "And God said, Behold, I have given you every herb yielding seed, which is upon the face of all the earth, and every tree, in which is the fruit of a tree yielding seed; to you it shall be for food." So God has planned it all, the grass to feed the animals which provide us with meat, and the grain and fruit for food for men. Whether we think of it or not, His goodness, His love, is providing for our needs every day.

Just as your bodies need food, so your souls have to be fed, but on a different kind of food, of course. One day Jesus was talking to the Jews, and they said, "Our fathers ate the manna in the wilderness; as it is written, He gave them bread

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out of heaven to eat." Jesus said, "I am the living bread which came down out of heaven; if any man eat of this bread, he shall live forever: yea and the bread which I will give is my flesh, for the life of the world." Just as God gave the grass and herbs and fruit to feed men's bodies, just as he sent the manna for the Israelites in the wilderness, so he sent his Son into the world to feed the souls of men. We must take Christ into our hearts and let him become a part of us, just as the food we eat becomes a part of our bodies.

Hereafter, as we go through the country and see the waving fields of grain and the orchards loaded with fruit, let us remember that it is God who provides these things for us, and that, as he thinks of our daily needs, so he has set his Son to be the bread of eternal life.



PART VI



SMALL CREATURES

"Provideth her meat in the summer, and gathereth her food in the harvest."

Prov. 6: 8.





WINTER HOUSES

DID YOU EVER wonder how the beautiful butterflies that fly about the gardens in the summer spend the winter? They are like some rich people; they have special winter houses in which they spend the cold months. If you go out into an orchard or the woods in winter when the leaves are all off the trees, you sometimes see hanging from a bare branch a little bag. If you examine one of them, you find that it is woven of a very fine silken thread, the outside rather loosely, it seems almost like a sheet of paper rather than a piece of cloth. Clear on the inside of the silken bag you will find a hard dark brown or black object rather bluntly pointed at both ends, one end a little more tapering than the other. You may have found similar objects in the garden, under boards or stones or even among the dead leaves, and sometimes down in the ground. They are the winter homes of certain insects.

In the fall of the year when the weather begins to get cool, the caterpillars begin to look for a place to spend the winter. They do not go south as many people do; but they seek out a place in the ground, among the fallen leaves, or under boards or stones. Others climb up into the trees and bushes and begin to weave a cocoon. They spin those silken threads out of their own bodies; and after fastening the threads securely to the branch, so that the winds and snows of winter

will not tear them loose, they weave the silken bag with themselves inside. There they form around themselves, just as their cousins in the ground are doing, that hard shell. This hardshelled caterpillar is called a "chrysalis." Most of them are about an inch long or less, although those of the larger insects may be much larger; and some have a long slim projection coming out of the larger end and curving back along the body to near the other end.

They stay in these winter houses until in the spring of the year the place where they are in hiding is warmed up; and then on some fine day that dark shell will be split from end to end, and out will come a beautiful butterfly. "But," you say, "it was a caterpillar that made that winter house." Yes, but it is a butterfly that comes out, for all during the winter, even though that caterpillar has not been eating or moving about, something wonderful has been taking place in that winter house. It is no longer a worm, but a butterfly or moth with wings and beautiful colors; and it will fly about among the flowers and add to our enjoyment of them.

When we watch such wonderful things happen in nature we cannot help saying, "Truly He who planned the world in that way must be a wonderful being!" We know that God has planned all these things; they bear the marks of his handiwork. If you examine one of those chrysalises carefully, just before the butterfly is ready to come out, you will notice the outline of the wings and the shape of the head and legs, delicately showing in that dark shell. I like to think of them as the markings left by the hand of God as he made it; for though the shell is made by the caterpillar, the caterpillar is God's creature doing His work, and shows His fingerprints.

Do you know that God has placed in each of us a spirit

which uses our body as a winter home, and which is being transformed, if we will let it be, into a more perfect being in Christ Jesus? Paul said, speaking of the Christian's life, "But be ye transformed by the renewing of your mind." If we try to know the will of God and to do it, to bring our lives into harmony with his plan, then we will be transformed from "bond servants of sin" to "children of God."

TWO BUTTERFLIES

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ONE DAY a bird was flying about in search of food. It liked a certain kind of butterfly, a large one with brick-colored wings bordered with black, and having certain markings on the wings. It knew where to find them, for they were usually flying about the flowers in the garden when the sun was warm and bright. Sure enough, there hovering over a blossom was an especially large one. The bird made a quick dive and caught the butterfly and went with it to a tree to eat what it had caught. The bird was very hungry, and it swallowe'd that butterfly nearly whole. And then it wished it hadn't! That bird had eaten many such butterflies and liked them, but this one— Ugh! It tasted awful. The bird wished that it could get rid of it quickly.

No, the butterfly had not changed its taste at all. The bird had just made a mistake. It had not caught the kind of a butterfly that it was looking for. This one was slightly larger and carried between the veins of its wings a little pocket of scent scales. They were there for this very purpose, to

make any bird that tried to eat it wish that it had found its dinner some place else. It is true that that buterfly was gone, but that bird would be very careful about catching butterflies after that. And because it would not catch that particular kind again, another kind of butterfly would be saved also. The butterfly that the bird wanted had no such scent scales on its wings, but it had grown to look very much like the one that had the scent scales, and because they looked alike the smaller one received the protection of the larger. You can find these two butterflies in your gardens almost any summer. The larger of the two is called the Monarch. The smaller one, which looks very much like it, is the Mimic. It is called that because it mimics the one with the bad taste in order to get the protection.

This is one of God's ways of caring for his people. Some things have a way of protecting themselves, and other things grow to look like them and are protected by the similarity of appearance. It is one of the lessons that man learned from the world about him during the war, when he painted his ships to look like the sea, and his trains and automobiles to look like the trees and bushes and fields in which they were located.

This protective mimicry is one of God's plans for his world, a means by which the weaker are cared for by the stronger. In such things we see the fingerprints of God, the marks that he has left to tell us of his wisdom and his thoughtfulness and his care for his creatures. If he has so planned for the butterflies, how much more will he do for us?

# THE STRENGTH OF AN ANT

How strong is an ant? It depends a great deal on the size of the ant. But ants are very strong. I am not sure what is the strongest living thing in the world in proportion to its size, but I venture to say that few things are stronger than ants. Did you ever watch ants at work? It is one of the most interesting ways to spend a warm afternoon. You can learn a great deal, not only about ants, but about working together, and about God. One day, as I was driving along the road, I saw one of the large ant hills made by the prairie ants. I stopped to watch them at work. These ants pile up the sand sometimes as much as two feet high in a beautifully symmetrical cone. They clear the ground around their home of all kinds of growth, leaving a large bare circle.

I watched these ants at work, coming and going busily for a time. Then I put a small stone in the mouth of the runway. I thought they would try to get it out, and that I could learn how strong they are. I could see the ants at work down below the stone, and I wondered what they were doing. Suddenly the stone dropped out of sight. They had found that it was too large for them to get out; so they dug a hole below it and let it drop down. That was easier than lifting it and carrying it away. I put a bit of a leaf near the opening. One ant picked it up and carried it off, clear out of the clearing around the ant hill. The leaf was several times as long as the ant, and much heavier; but he was able to carry

it all alone. Then I took the top of a Russian thistle plant and put it on the hill. The ants looked it over and tried to move it. But it was too large, even for their combined strength. So they set to work, cutting the leaves with their powerful jaws and carrying away the pieces. Finally they were able to move what was left, and they carried that away.

I noticed two ants coming out of the runway. One was backing out pulling something behind it, and the other was underneath pushing. When they came out on top I saw that their burden was a stone several times as large as both the ants together. When one looks at one of those ant hills, and then around at all the other hills dotting the prairies, one realizes that ants do a tremendous amount of work.

How strong is an ant? I don't know exactly. Someone has estimated that if a man were as strong as an ant in proportion to his size, he could lift one hundred nad twenty tons, or about 1,350 times his own weight.

Why are ants so strong? If you take time to watch them at work, you will soon see the reason. They have to dig the hard earth, they have to lift and carry stones and sticks and all sorts of things. They have to be strong in order to do their work, to live their lives. When you examine an ant you wonder wherein his strength lies. He is sparely built. Surely those legs, as thin as a fine thread, can have no great strength; but they have. The head of an ant is a very tower of strength, with its powerful mandibles or jaws for cutting and grasping.

The ant teaches us a great deal about how carefully God has fitted his creatures to do their work, each in its own way. The author of Proverbs said, "Go to the ant, thou sluggard; consider her ways, and be wise." When we study the ant,

we can see the fingerprints of God, the marks of his handiwork, the signs that God is not unmindful even of these little things. And we can be sure that he is not unmindful of us.

#### THE ANT-LION

When you are walking in the woods or over the hills, have you ever noticed little funnel-shaped holes in the dust? Usually they are under some overhanging rock or where the trees protect the ground from the rain and storm. I am sure you would remember them if you had ever seen them, for they are very interesting. They look as if someone had taken a top and pressed it into the dust and then had turned it around as he took it out, leaving the sides steep slopes, covered with fine dust. Do you know what makes those holes and what they are for?

The next time you find one, if it is fresh, that is, if the dust is perfectly dry and smooth on the sides, take a straw and carefully uncover the bottom. You will have to work quickly and watch closely. And if you are quick enough you will discover a little insect, just the color of the ground, with a very large head and with large strong jaws, large for such a small insect. It is the ant-lion. He dug the pit and carefully dusted its sides, and then hid himself in the bottom to wait the coming of some other insect. That is the way he gets his food, and the pit is a trap. When some small insect like an ant comes along and unwarily runs into the top of the funnel, it is quickly carried to the bottom by the loose

grains of dust; and the ant-lion grasps it in its strong jaws.

The Bible speaks of liers-in-wait hidden in some place to catch the unwary traveler. Bad habits are like that. They conceal themselves in some place that looks innocent enough; and when the boy or girl comes along, before he knows it he has been dragged down into sin. Places that sell alcoholic drinks are like that, prepared to be attractive, and innocent enough in appearance; but anyone who steps inside is liable to be carried to the bottom of the pit, a slave to alcohol. Bad habits of all kinds are like that—easy to get into, but almost impossible to get out of.

# WORKERS IN THE DARK

When I was a boy we discovered one day that the timber that formed the jamb of the door of the barn was hollow. You could push your finger almost any place into what seemed to be solid wood. As you looked at it, it seemed to be in perfect condition, strong, and able to hold that door for many years. But the hinge screws pulled out, and there was no strength in the plank at all. It was nothing but a shell. It was the work of the white ants, or termites. These little insects work entirely in the dark. That is the reason we did not discover what they were doing until it was too late. They made their way up into that door jamb through the floor from the ground under the barn. They ate out all the wood on the inside, carefully avoiding eating through to the light, so that they left only the shell of the timber.

In tropical countries termites are much worse than they are in the United States. I saw a great many of them in Puerto Rico. The floor of a building would begin to sag, and it would be found that the foundation posts had been eaten away. A piece of furniture that had stood in one place for some time would suddenly break and reveal the fact that it was hollow. The timbers of a bridge would give way and show what the termites had been doing. A tree in the forest would fall in the wind, and the broken trunk would be honeycombed with the tunnels made by these white ants.

They never work in the light, nor go from one place to another in the daytime. Frequently one finds on the wall and ceiling of a little-used room a tunnel of mud, built there by these insects as they seek to get from one place to another across a concrete wall or plastered ceiling. They are workers-in-the-dark, and they do a great deal of damage.

Like these termites are the people who, Jesus said, "loved the darkness rather than the light; for their works were evil." They destroy the heart and leave the appearance of wholeness. Evil thoughts are like that. They cover themselves up so that men cannot see them and recognize them for what they are. They hide themselves and are deceitful, destroying the best that there is in one, but leaving the appearance of strength and wholeness. Then suddenly a test comes, and that man's character is shown to have been undermined by the workers-in-the-dark, the thoughts that he believed were hidden from the world.

# **BABY GROUSE**

WE WERE up in the Greenhorn Mountains on the Fourth of July. As we were walking through the forest one of the group suddenly stopped and said, "Look!" There on the ground, just a few feet in front of us, was a baby grouse. It was flattened out against the ground and was just as still as a stone, and looked very much like a bit of the granite rocks which were lying about. The only things which showed any movement were its eyes, which kept blinking at us. Thinking that it had been hurt, we tried to stroke its back. In a flash it rose up, stretched its little wings, flew about twenty feet, and crouched down again, this time alongside of a stone and so nearly like it that we could hardly tell it from the stone. We called the children; and while we waited for them to come and see this little bird, another baby grouse which had probably been in just as plain view as the first one, ran off like a streak into the brush to a better hiding place.

While we stood there looking around and keeping an eye on that little fellow by the stone, we were startled by a terrible noise, a loud flapping of wings and drumming, almost at our feet. It was the mother grouse, as large as a hen, beating the ground with her wings to attract us away from her family. She flew up into a nearby tree and kept up a constant clucking and drumming. After a while she flew to the top of another tree farther away, but continued to call to her babies to keep themselves hidden. We picked up the

little chick by the stone and held it in our hands for a while; then we put it on a large stone to watch it better. In an instant, while our attention was attracted to something else, it disappeared as completely as if it had vanished into thin air. We did not try to find it again, and carefully made our way to another part of the woods for fear of stepping on any little grouse hidden among the dead leaves.

Nature has a wonderful way of protecting her children. Those tiny birds, only a few days old, knew that they could not fly away; so they made themselves look as much like the leaves and stones as they could; and at the moment when our eyes were off them they made away to a safer hiding place. Another thing we saw there was the mother love of that grouse hen. She was willing to risk danger for herself if she might lead us away from her chicks. I verily believe that she would have flown into our faces if it had been necessary.

God has prepared his creatures to live in his world; he has left the marks of his loving thought for them in their habits, and in the way they meet their life problems.

## **WORKING BIRDS**

ONE SUMMER while I was resting in camp I noticed a wood thrush running along the ground. It was interesting to see how it approached its nest: a short run in this direction, and then a short run in another direction, then after a quick look around, a swift flight to the tree where the little ones were. This bird had a worm in its beak, so I knew that it was going

to its nest. I watched and was surprised to see that it flew to a tree very close to the camp, where the whole family passed many times a day. The mother bird had scarcely flown away before the father came, also with a worm. And every few minutes one or the other of the birds skipped along the ground and then suddenly darted up to the branch which held the nest and the little ones. Then by listening closely one could hear those young birds begging for the worm.

I thought of what Jesus said of God's care for the birds: "Behold the birds of the heaven, that they sow not, neither do they reap, nor gather into barns; and your heavenly Father feedeth them. Are not ye of much more value than they?"

Some people read that verse and think that they should not work, that God will take care of them if only they have faith. The wood thrush has faith, but knows that he must go after what God provides. He must do his part, or the little birds will starve up there in the nest. God will take care of us, but we must do our part. God does only that which we cannot do. The birds cannot sow and reap; so God provides their food for them in the worms and seeds that they can find. Men can sow and reap, but God sends the rain and the sunshine so that the crops will grow. Life, that of the birds, and that of man, is a partnership with God. He does his part; we must do our part.